## LIST OF EXERCISES

## a) Word Processing

1. Document creation, Text manipulation with Scientific notations.
2. Table creation, Table formatting and Conversion.
3. Mail merge and Letter preparation.
4. Drawing - flow Chart

5. Spread sheet - inclusion of object, Picture and graphics, protecting the Document and sheet.
6. Sorting and Import / Export features.

## Simple C Programming

9. Data types, Expression Evaluation, Condition Statements.
10. Arrays
11. Structures and Unions
12. Functions


MICROSOFT
WORD

## MICROSOFT WORD

Word processor is used to produce documents for business or personal use such as newsletter, reports, letters and essays. We might say that a word processor is an intelligent typewriter. We can type a whole page, make corrections (editing), use up paragraphs in different styles and shapes and columns (formatting) and also check spelling, find and insert synonyms for a word (Thesaurus) and process it in many more ways before we actually put that page to print.

The following are the main features of a word processor:

Fast
Editing features
> Permanent storage
$>$ Formatting features
> Graphics

Ex:No:1
Date :

DOCUMENT CREATION, TEXT MANIPULATION SCIENTIFIC NOTATIONS

## AIM:

To prepare an advertisement and to insert a formula using the various formatting option and symbols available in MS-word.

## PROCEDURE:

## a) Advertisement-1

Step 1: Open a new document using File-> new option and type text.
Step 2: Place the different sized boxes in the document from the drawing toolbar
Step 3: Type the text in the boxes.
Step 4: Fill the boxes with black color using fill color option from the drawing toolbar
Step 5: Place the appropriate logo from the insert->picture->from file option
Step 6: Choose the appropriate ward art gallery to place the text in boxes
Step 7: Choose the bullets for the text from the for matting toolbar.
Step 8: Use all these options to create an advertisement as specified in exercise.

b) Equations

Step 1: Enter the equation in the document.
Step 2: Select the character, which you want to show as a sub script
Step 3: For subscript, choose the font option from the format menu, then enable the superscript Thick box from the font dialog box.

Step 4: For superscript, choose the font option from the format menu, then enable the superscript Thick box from the font dialog box.

## c) Inserting symbols

Step 1: Type the text, then put the cursor where you want to add the symbol
Step 2: Choose symbols option from the insert menu.
Step 3: Shows the symbols dialog box. Then choose the appropriate font type.
Step 4: Then choose required symbol from the symbols dialog box, then click.

## d) Creating Resume

Step 1: Open a new document using File-> new option, new document dialog box opened.
Step 2: In the Template tab, Click Resumes option
Step 3: Select the sample Resumes, and update the data accordingly
Step 4: Then save the resume using save as option in the save the document.

## OUTPUT:

## DOCUMENT CREATION \& INSERTING SYMBOLS



## RESUME

Name

Address Contact details with corresponding symbols

Objectives:
Educational Qualification:

Extra curricular activities:
Co-curricular activities:


Thanking you,


## Ex:No:2 TABLE CREATION, TABLE FORMATTING ANDCONVERSION <br> Date :

## AIM:

To create a table for the given data and utilize all the available options in the word processor.

## PROCEDURE:

a) For table insertion

Step 1: Choose table -> Insert -> Table option.
Step 2: It shows the insert table dialog box.
Step 3: Then choose the required number of Columns and Row.


Step 2: It shows the insert table dialog box.
Step 3: Set of columns to 5, Number of Rows to 4 and column width in the insert table dialog Box and click.

Step 4: Now the table is inserted in the document with 5 columns and 4 rows.
c) Auto formatting the table

Step 1: Select the table in the document.
Step 2: Choose table Auto Format option in the table menu
Step 3: Now it shows the table Auto Format dialog box.
Step 4: Choose the required Format from the Format list box. Then click ok.
Step 5: Now the specified Format is applied to the table.

## d) Converting the table to text

Step 1: Select a table in a document.
Step 2: Choose the convert table to text option from the table menu.
Step 3: Now it shows the convert table to text dialog box.
Step 4: Choose the separator of the text. Then click ok.
Step 5: Now the table in formation is converted into text in a document.
e) Convert the text to table

Step 1: Select the text in the document
Step 2: Select the convert text to table option from the table menu.
Step 3: Now the convert text to table dialog box.
Step 4: Choose the table size and separator text option then dialog box click on ok.
Step 5: Now the text information is converted into a table.



## OUTPUT:

## TABLE CREATION



## CONVERTING THE TABLE TO TEXT



## RESULT

Thus the table has been created for the given data and also converted from text to


## Date :

## AIM:

To illustrate the concept of mail merge in word processor.

## PROCEDURE:

## Creating the main Document

Step 1: Select file option in the menu bar and click. New to open a new document.
Step 2: From the tools menu select the mail merge
Step 3: It shows the mail main document area of mail merge helper dialog box, click on create
Button, it shows the available options.
Step 4: Select form letters from the pull down menu of create button
Step 5: Click active window button in Microsoft word dialog box.

## Creating a Data Source

Step 1: In the mail merge helper dialog box, click get data button.
Step 2: Select create data source to get create data source dialog box.
Step 3: Select the appropriate fields from the field names in header row and drop down list box Or add new fields by typing the field name box and click on add field name.

Step 4: Remove the unwanted field by clicking the remove field name.
Step 5: Click ok. Now the save as dialog box appears to save the data source.
Step 6: Type the appropriate name for the data source the click ok.
Step 7: It dialog box asking to and records to data base in the following dialog box.
Step 8: Click on edit data source to add records to the data source.
Step 9: In shows the data from dialog box, add records to the data source.
Step 10: Then the click ok, the mail merge tool bars is automatically displayed in the main

## Creating the merged document

Step 1: Click on the insert merge field on the mail merge tool bar.
Step 2: Selected the desired fields from the drop down menu of insert merge field.
Step 3: After inserting the merge fields, choose tools->mail merge.
Step 4: Mail merge helper dialog box shows, from this dialog box, Click merge the click on Merge button, to create a new document. New the main document and data source is Merged into new document.


## OUTPUT:

## Using mail merge send the following letter to 5 of your friends.

From

Anto,
B-62,13 th cross street, Rose apartments, Ambattur, Chennai.
To
<<friend Name>>


I hereby invite you and your family members for the $25^{\text {th }}$ anniversary of my parents that is to be held on 28-11-2008 at our home. Please do come and share with us our joy. I will be disappointed in your absence.

Yours lovingly,

Anto


## RESULT:

Thus the concept of mail merge has been illustrated successfully in the word processor.

Date :

## AIM:

To draw the given flowchart utilizing the various auto shapes in word processor.

## PROCEDURE:

## a) Drawing

Step 1: Choose the up ribbon option in the starts and banners of the auto shapes menu in the Drawing tool bar.

Step 2: Draw the required size of up ribbon in the document.
Step 3: Click on the insert word action in the drawing tool.
Step 4: Now the word art gallery dialog box is shown with different style.
Step 5: Choose the required style, and then click ok.
Step 6: Now the edit word art text box, dialog box.
Step 7: Type the text then click on ôk.
Step 8: place the text in the up ribbon.

## b) Flow Chart

Step 1: Choose flow chart option in the auto shapes menu of the drawing tool bar.
Step 2: Choose the appropriate flowchart symbol, and then drag the symbol in the document
Step 3: Type the text in the symbol by right click then choose add text.
Step 4: Using the flow button, line style button, Arrow style in the drawing tool bar draw the lines Connecting to the different flow chart symbols.

Step 5: Select all the flow chart symbols and lines in the document using the select object button, Then right choose grouping, then click on group.

Step 6: Now all the flow chart symbols are grouped into one.

## DRAWING A FLOW CHART




## RESULT:

Thus the given flowchart has been created in the word processor.

## MICROSOFT



## MS-EXCEL

An electronic spreadsheet or spreadsheet is a table of rows and columns into which data is entered. Spreadsheet software makes it possible to enter data into a task format, manipulate, store, print and create reports and graphics using them.

Microsoft Excel is the most widely used and versatile spreadsheet package and lets you to organize your data into lists and then summarize, compare and present the data graphically. It has the user interface features common to other Microsoft office applications. ) 11

MS-EXCEL allows you to
Enter and edit data in a worksheet
$>$ Use functions and formulae to calculate and analyze data
$>$ Create colorful charts and graphs
$>$ Save time by combining a series of commands into a single command by using MACROS

## Ex:No:5

## CHART CREATION

## Date :

## AIM:

To created the student mark list and find to total, average and grade using the formula editor and to insert the appropriate chart in spread sheet.

## PROCEDURE:

Step 1: Enter the student name, marks in three subject.
Step 2: Place the cursor in E2, type=sum (B2-D2)
Step 3: Place the cursor in f2, type=AVERAGE (B2-D2)
Step 4: Click on G2, type


IF (F2>=75, "DISTINCTION", IF (F2>=60, "FIRST CLASS", IF (F2>=50
"SECOND CLASS", THIRD CLASS"))))
Step 5: Copy the formula to the remaining students.
Step 6: Finally the worksheet is follows.

## LINE CHART



## PIE CHART




RESULT:
Thus the student mark list has been prepared along with the chart.

## Date :

## AIM:

To calculate HRA, DA, TA, PF, GPF, LIC, Gross salary, Deductions, Net salary from the given data in a worksheet.

| ENO | Name | Basic | HRA | TA | DA | LIC | PF | GPF | GS | DED | NET |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | RAJ | 20000 |  |  |  |  |  |  |  |  |  |
| 2 | RAVI | 15000 |  |  |  |  |  |  |  |  |  |
| 3 | MUTHU | 10000 |  |  |  |  |  |  |  |  |  |
| 4 | SANGEETHA | 7820 |  |  |  |  |  |  |  |  |  |
| 5 | RAMANI | 4569 |  |  |  |  |  |  |  |  |  |

Where
HRA is $18 \%$ of basic

DA is $15 \%$ of basic

TA is $12 \%$ of basic

PF is $10 \%$ of basic

GPF is $5 \%$ of basic

LIC is $7 \%$ of basic

GS (Gross salary) = Basis $+\mathrm{HRA}+\mathrm{DA}+\mathrm{TA}$
DED $($ Deduction $)=\mathrm{PF}+\mathrm{GPF}+\mathrm{LIC}$
NET (Net salary) =GS-DED

## PROCEDURE:

Step 1: To enter Microsoft Excel, Click "start" button then click "program" from "programs" menu then click "Microsoft Excel"

Step 2: For opening a word document do the following. Click "file" menu from the menu bar. From this file menu click "new" option. This will display the new work sheet.

Step 3: Enter the data by placing the mouse pointer in a cell and a double click on


Step 5: Calculate the same for other columns and drag them to all the cells.

Step 6: Now the entire table is ready in spreadsheet.

## OUTPUT:






## RESULT:

Thus the formula editing using excel sheet to calculate HRA, DA, TA, PF, GPF, LIC, Gross salary, Deductions, Net salary from the given data is completed.

Date:
AIM:
i. To Insert object in the worksheet
ii. To Insert picture in the worksheet
iii. To Protect a sheet

## PROCEDURE:

Step 1: To enter Microsoft Excel, Click "start" button then click "program" from "programs" menu then click "Microsoft Excel".

Step 2: For opening a word document do the following. Click "file" menu from the menu bar. From this file menu click "new" option. This will display the new work sheet.

Step 3: For inserting object in the worksheet, choose objects option in the insert menu.

Step 4:For inserting picture in the worksheet, choose Picture option in the insert menu.

Step 5: For protecting your worksheet, choose Protection option from Tools menu, then choose Protect Sheet option, Protect sheet dialog box appears. Type a password and press enter.

Step 6: Now your worksheet is protected and can be entered only with the password.

## INCLUSION OF OBJECT




## RESULT:

Thus the given objects has been included in the spread sheet.

## Date:

## AIM:

i. To sort the given data in the worksheet
ii. To include Import/export features

## PROCEDURE:

Step 1: To enter Microsoft Excel, Click "start" button then click "program" from "programs" menu then click "Microsoft Excel".


Step 3: Select the data to be sorted and select data from the menu and click sort.

Step 4: Specify the order in which the data are to be sorted (ascending or descending) and click OK. Then the sorted data appears in the sheet.

Step 5: To import a file select Insert->object->create from file.

Step 6: To export a file while saving the file save it as webpage so that it can be viewed by internet explorer.

## OUTPUT:

Sort the given data in ascending and descending order (consider the name).

| NAME | MARK1 | MARK2 | MARK3 |
| :---: | :---: | :---: | :---: |
| Anto | 96 | 85 | 45 |
| Ignatius | 80 | 59 | 85 |
| Griffin | 78 | 89 | 45 |
| Mary | 90 | 85 | 89 |
| Herin | 82 | 96 | 81 |
| Ram | 73 | 52 | 99 |
| Devi | 76 | 90 | 86 |

## ASCENDING ORDER



DESCENDING ORDER


## IMPORTING A

## FILE




## RESULT:

Thus the sorting and import and export features using Ms excel is completed.


## C PROGRAMMING



## INTRODUCTION TO C PROGRAMMING:

- C is a structured language.
- A structured language allows variety of programs in small modules.
- It is easy for debugging, testing and maintenance.
- C is an imperative (procedural) systems implementation language.
- It was designed to be compiled using a relatively straight forward compiler, to provide low level access to memory, to provide language constructs that map efficiently to machine instruction and to require minimal run-time support.
- A program is a set of instructions for performing a particular task. This written program is called as source program.
- The source program to be converted to the machine language. Which is called as object program. Either Interpreter or Compiler will perform this function.
- An Interpreter reads only one line of a source program at a time and converts it to object code. Error will be indicated instantly.
A Compiler reads the entire program and converts it to the object code. It provides the error not one but errors of the entire program.

Date :

## AIM:

To write a c program to find the illustrate size of the variables.

## ALGORITHM:

## Step 1: Start

Step 2: Read the input values of num, dec, ext, ltr, str.
Step 3: Print size of num
Step 3.1: Print size of dec
Step 4: Print size of ext
Step 5: Print size of ltr


## RESULT:

Thus the program to find "size of variable" has been written and executed successfully.

## Ex:No:10 TEMPERATURE CONVERSION

## Date :

## AIM:

To write a program in c to find centigrade and fahrenheit values

## ALGORITHM:

Step 1: Start
Step 2: Read centigrade value to c
Step 3: Compute equivalent Fahrenheit value using formulae

$$
\mathrm{F} \leftarrow 1.8^{*} \mathrm{c}+32
$$

Step 4: Print the value F
Step 5: Read Fahrenheit value to Fn
Step 6: Compute equivalent centigrade value using formulae


Step 8: Stop

## RESULT:

Thus the program for "temperature of conversion" has been written and execute successfully.

## Ex:No:11 AREA OF TRIANGLE

## Date :

## AIM:

To write a program in C to find the area of a given triangle of sides $\mathrm{a}, \mathrm{b}, \mathrm{c}$.

## ALGORITHM:

Step 1: Start
Step 2: Read the input values of sides of a triangle $a, b, c$.
Step 3: Compute $\mathrm{s}=(\mathrm{a}+\mathrm{b}+\mathrm{c}) / 2$
Step 4: Compute $\mathrm{d}=\left(\mathrm{s}^{*}(\mathrm{~s}-\mathrm{a})^{*}(\mathrm{~s}-\mathrm{b})^{*}(\mathrm{~s}-\mathrm{c})\right)$
Step 5: Compute the area of triangle area $=$ sqrt $(d)$


Thus the program for the construction of "Area of triangle" has been written and executed successfully.

## Ex:No:12

## SUM OF SERIES

## Date :

## AIM:

To write a program in c to find sum of the series $1+(1+2)+(1+2+3)+\ldots . . \mathrm{n}$.

## ALOGRITHM:

## Step 1: Start

Step 2: Read the value of $n$
Step 3: Initialize value for $\mathrm{i}=1, \mathrm{~s}=0$
Step 4: Check whether the value of i is less than or equal to value of n .
Step 5: Repeat for $\mathrm{i}=1$ to n .
Step 6: Initialize values for term $=0, j=1$


Step 11: Compute $\mathrm{S}=\mathrm{S}+$ term
Step 12: Increment I by 1
Step 13: Print the value of $s$
Step 14: Stop

## RESULT:

Thus the program for the construction of the sum of series has been written and executed successfully

## ELECTRICITY BILL PREPARATION

## Date :

## AIM:

To write a program for electricity bill preparation using the various basic data types.

## ALGORITHM:

Step 1: Start
Step 2: Read srl no, recpt no, bill month, date.
Step 3: Read present and previous meter readings.
Step 4: Consumed=Present-Previous
Step 5: Check if consumed>=200
Step 5.1: Total=Consumed $* 2.50$ else
Step 5.2: Total=Consumed*1.50
Step 6: Print srl no, recpt no, bill month, date.
Step 7: Print Consumed total



Step 8: Stop

## RESULT:

Thus the program for electricity bill preparation has been written and executed successfully

## Ex:No:14

MAXIMUM OF THREE NUMBERS
Date :

## AIM:

To write a program to print maximum value of given 3 numbers.

## ALGORITHM:

Step 1: Start
Step 2: Read the input values $a, b, c$.
Step 3: Call and print the function maximum () with parameters $\mathrm{a}, \mathrm{b}, \mathrm{c}$.
Step 4: Stop


Step 4: Check whether the value of z is greater than the value of max.
Step 5: If step- 4 is true, assign $\max =\mathrm{z}$
Step 6: Return the value of max to main program.

## RESULT:

Thus the C program for finding the value of given three integer has been written and executed successfully.

Date :

## AIM:

To write a program in C to find the Factorial of the given number

## ALGORITHM:

## Step 1: Start

Step 2: Read input value $n$
Step 3: Call and Print function fact (n)
Step 4: Stop

Step 1: Function fact start


## RESULT:

Thus the C program finding the "Factorial" has been written and executed successfully.

## MATRIX ADDITION

## Date :

## AIM:

To write a program to print sum of the matrix

## ALGORITHM:

Step 1: Start
Step 2: Read rows and columns of matrix $A$ and $B$ into $n, m, p, q$
Step 3: Check the values of $n$ is equal to $p$ and $m$ is equal to $q$
Step 4: If step 3 is true. Do step 5 to step 20
Step 5: Repeat for $\mathrm{i}=0$ to n
Step 6: Repeat for $\mathrm{j}=0$ to m


Step 12: Read into b[i][j]
Step 13: End of step 11
Step 14: End of step 10
Step 15: Repeat for $\mathrm{i}=0$ to n
Step 16: Repeat for $\mathrm{j}=0$ to m
Step 17: Add $\mathrm{a}[\mathrm{i}][\mathrm{j}], \mathrm{b}[\mathrm{i}][\mathrm{j}], \mathrm{c}[\mathrm{i}][\mathrm{j}]$
Step 18: Print $\mathrm{c}[\mathrm{i}][\mathrm{j}]$
Step 19: End of step 16
Step 20: End of step 15
Step 21: If step 3 is false, print "Addition is not possible".
Step 22: Stop


Thus the C program for finding the sum of the two matrices has been written and executed successfully.

## STUDENT MARKLIST USING STRUCTURE

## Date :

## AIM:

To write a C program print student using structure.

## ALGORITHM:

## Step 1: Start

Step 2: Define structure stud with member
Roll no; integer
Name [30]; character
Mark 1, mark 2, mark 3, total: integer
Avg: total/3


Step 6: $\mathrm{a}[\mathrm{i}]$.mark 1, $\mathrm{a}[\mathrm{i}]$.mark 2, $\mathrm{a}[\mathrm{i}]$.mark 3
Step 7: $\mathrm{a}[\mathrm{i}] \cdot$ total $=\mathrm{a}[\mathrm{i}] \cdot$ mark $1+\mathrm{a}[\mathrm{i}] \cdot$ mark $2+\mathrm{a}[\mathrm{i}] \cdot$ mark 3
Step 8: $a[i] . a v g=a[i] . t o t a l / 3$
Step 9: End of step 4
Step 10: Check if a[i]. avg<40 then assign a[i].grade=D
Step 11: Check if $\mathrm{a}[\mathrm{i}] \cdot$.avg $<60$ then assign $\mathrm{a}[\mathrm{i}]$.grade $=C$
Step 12: Check if a[i].avg<80 then assign a[i].grade=B else
Step 13: a[i].grade='A'
Step 14: Print $\mathrm{a}[\mathrm{i}]$.roll no, $\mathrm{a}[\mathrm{i}]$.name, $\mathrm{a}[\mathrm{i}]$.mark 1, $\mathrm{a}[\mathrm{i}]$.mark 2, $\mathrm{a}[\mathrm{i}]$.mark 3, $\mathrm{a}[\mathrm{i}]$.total, a[i].avg, a[i].grade.

Step 15: Stop.

## RESULT:

Thus the C program for the construction of mark details is written and executed successfully


Date :

## AIM:

To write a C program to print employee details using unions

## ALGORITHM:

Step 1: Start
Step 2: Declare union of employee
Step 3: Read employee details using union variable
Step 4: Print employee details using union variable


## RESULT:

Thus the program to print employee details has been using union has been constructed and executed successfully.

