



\begin{tabular}{|c|c|c|}
\hline 32 \& \begin{tabular}{l}
Piracy：Making and using duplicate hardware and software is called piracy \\
Virus：A virus is a self－replicating program that can cause damage to data and files stored on our computer． \\
data digitization ：Digitization refers to the conversion of non－digital material to digital form．A wide variety of materials as diverse as maps， manuscripts，moving images and sound may be digitized．
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1
1 \\
\hline 33 \& OutPut： abcdeedcba \& 3 \\
\hline \& SECTION－IV \& \\
\hline 34 \& \begin{tabular}{l}
Auto spell check feature can be turned \(\mathbf{O N}\) or \(\mathbf{O F F}\) by clicking the Auto spell cl \(\stackrel{\text { AEC }}{\sim} \mathbf{k} \quad\) icon on the tool bar． \\
．When auto spell check options \(\stackrel{\text { apo }}{ }^{\circ}\) is ON，while typing the misspelled words staroffice underlines the word with squiggly red line．The red lines implies the word is＂Not in dictionary＂． \\
To make the corrections in the misspelling in star office writer document \\
（a）Backspace key is pressed to delete a misspelled word and retype the words． \\
（b）If the right Spelling is not known，star office writer can help the user with some choices．Right click the misspelled word，a pop－up menu appears．If the correct spelling is shown a click can be made on that word．StarOffice Writer automatically replaces the specified word．
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2

2 \\
\hline or \& \& \\
\hline
\end{tabular}

Explain Any Seven Icon：

－Table Fixed
－Table Fixed，Proportional
－Table，Variable
－Merge Cells－This icon is used to combine two or more cell into a single cell．
－Split Cells－This icon is used to split a cell into two or more cells．
－Optimise－Clicking on this icon displays a pop up menu with options like Space columns equally，Space rows equally，Optimum row height and Optimum column width．
囲－Insert Row－This icon is used to insert a row below the current row．
国－Insert Column－This icon inserts a column to the right of the current column．

囲－Delete Row－This icon deletes the current row from the table．

- Calculations are automated through the built-in mathematical, financial and statistical functions.
- Accurate results to any desired level of decimal points are possible
- Worksheets can be quite big in size

36. 

Explain Any One Methods:

## Explain call by value method with suitable example.

- In Call by value method, the called function creates new variables to store the value of the arguments passed to it.
- This method copies the values of actual parameters (parameters associated with call statement) into the formal parameters (the parameters associated with function header).
- Thus the function creates its own copy of arguments and then uses them.
- In call by value method, the flow of data is always from the call statement to the function definition.
- Changes or modifications that are made to formal parameters are not reflected in the actual parameters.


## Example Program:

```
\#include <iostream.h>
\#include <conio.h>
\# include <iomanip.h>
void swap (int n1, int n2)
\{
int temp;
temp = n ;
n1 = n2;
n2 = temp;
```



```
\}
void main ()
\{
int \(\mathrm{m} 1=10, \mathrm{~m} 2=20\);
clrscr ();
cout <<" \(\backslash \mathrm{n}\) Values before invoking swap" \(\ll \mathrm{m} 1 \ll\) ' \(\backslash \mathrm{t}\) ' \(\ll \mathrm{m} 2\); cout
<<" \(\backslash\) n Calling swap..";
swap (m1, m2);
cout << " \(\backslash \mathrm{n}\) Back to main.. Values are" \(\ll \mathrm{m} 1 \ll\) ' \(\backslash \mathrm{t}\) ' \(\ll \mathrm{m} 2\); getch
();
\}
Output
```

Values before invoking swap $10 \quad 20$
Calling swap .....

In call by value method, any change in the formal parameter is not reflected back to the actual parameter.
2. Explain call by reference method with suitable example.

- In call by reference method, the called function arguments - formal parameters become alias to the actual parameters in the calling function.
- This means that when the function is working with its own arguments, it is actually working on the original data.


## Example Program:

\# include <iostream.h>
\#include <conio.h>
void swap (int \&n1, int \&n2)
\{
int temp;
temp = n 1 ;
n1 = n2;
n2 = temp;
cout $\ll{ }^{\prime} \backslash \mathrm{n}^{\prime} \ll \mathrm{n} 1 \lll^{\prime} \backslash \mathrm{t}^{\prime} \ll \mathrm{n} 2 \ll^{\prime} \backslash \mathrm{n}^{\prime}$;
\}
void main ()
\{
int $\mathrm{m} 1=10, \mathrm{~m} 2=20$;
clrscr();
cout<<" $\backslash$ nValues before swap call" $\ll{ }^{\prime} \backslash \mathrm{t}^{\prime} \ll \mathrm{m} 1 \ll{ }^{\prime} \backslash \mathrm{t}^{\prime} \ll \mathrm{m} 2$;
cout<<"\n Calling swap..";
swap(m1,m2);
cout $\ll$ " $\backslash$ n Back to main.Values are" $\ll ' \backslash \mathrm{t}^{\prime} \ll \mathrm{m} 1 \ll{ }^{\prime} \backslash \mathrm{t}^{\prime} \ll$ m2; getch
();
\}
Output:
Values before invoking swap 1020
Calling swap...
$20 \quad 10$
Back main. Values are $20 \quad 10$
The modifications made to formal parameters are reflected in actual
parameters, because formal and actual parameters in reference type point to the same storage area.

## Main Swap

$\mathrm{m} 1=10 \mathrm{n} 1=10$
$\mathrm{m} 2=20 \mathrm{n} 2=20$
temp
Assume storage area of m 1 is $0 x f 1$, and m 2 is $0 x f 4$.
$\mathrm{m} 1=0 \mathrm{xf} 1=10$
$\mathrm{m} 2=0 \mathrm{xf} 4=20$
Reference to formal parameters may be read as $\mathrm{n} 1=10 ; \mathrm{n} 1$ is a reference to m 1 , which may be depicted as: int $\& n 1=m 1$

This means that n 1 is an alias to m 1 , hence m 1 and n 1 refer to same storage area, hence the statements may be rewritten as :
$\mathrm{n} 1=\mathrm{m} 1=0 \mathrm{xf} 1=10$
$\mathrm{n} 2=\mathrm{m} 2=0 \mathrm{xf} 4=20$
Address Before Exchange After exchange
Oxf1 (n1, m1) $1020 \quad$ Oxf4 (n2, m2) 2010

> In Call by reference method, any change made in the formal parameter is reflected back in the actual parameter.

FOR LOOP
for .........Loop" is an entry controlled loop and is used when an action is to be repeated for a predetermined number of times.

## Syntax:

```
for(intial value ; test-condition ; increment)
{
        action block;
}
```

The general working of for (; ;)loop is :

1. The control variable is initialized the first time when the control enters the loop for

## the first time

2. Test condition is evaluated. The body of the loop is executed only if the condition is

> TRUE. Hence for(;;) loop is called as entry controlled loop.
3. On repetition of the loop, the control variable is incremented and the test condition
will be evaluated before the body of the loop is executed.
4. The loop is terminated when the test condition evaluates to false.

Each segment in the for loop can comprise a set of instructions, each instruction should be separated by a comma operator.
> Initialisation is executed only once, ie., when the loop is executed for the first time
> Test condition is evaluated before the commencement of every iteration
> Increment segment is executed before the commencement of new iteration.

## Example Program:

\# include <iostream.h>
\# include <conio.h>
void main()
\{
int i,fact = 1 ;
for $(\mathrm{i}=1 ; \mathrm{i}<6 ; \mathrm{i}++$ )
\{
fact * $=$ i;
cout << " $\backslash$ nThe factorial of the number is .." << fact; \}
getch();
\}
37. rules for constructor definition and usage

1) The name of the constructor must be same as that of the class
2) A constructor can have parameter list
3) The constructor function can be overloaded
4) The compiler generates a constructor, in the absence of a user defined constructor
5) The constructor is executed automatically

Any 5 Points:
rules for destructor definition and usage

1) The destructor has the same name as that of the class prefixed by the tilde character ' $\sim \cdot . .1$
2) The destructor cannot have arguments
3) It has no return type
4) Destructors cannot be overloaded i.e., there can be only one destructor in a class
5) In the absence of user defined destructor, it is generated by the compiler
6) The destructor is executed automatically when the control reaches the end of class scope
7) 



