Operator Example

(a)What will be the output of the following program? (4)

```
main ()
{
  int    x=5,y,z;   ,
z = y = x;
y- = --x;
z- = x --;
x-=--x-x--;
cout<<"y ="<<y<<"\t z =" << z<<"\tx="<<x;
}
```

(b) What will be the output of following programs? (12)

i)
```
main ( )
{ intx- 10,y,z;
z=y=x;
y- = x--;
x- = --x-x--;
printf("y=%dz=%dx=%d"y,z,)
}
```

iii)
```
main ( )
{floata = 0.5, b = 0.9 ;
if(a&&b>0.9)
printf("IFPART");
printf(" ELSE PART");
}
```

ii)
```
main ( )    .
{ inta = b=c = d = e = 40; .
printf("%d%d%d%d%d">a,b>c,d,e);
}
```

iv)
```
main ( )
{  inti = 0;
for (; i < 100; i ++);
printf ("This will printf hello 100 times")}
```

6. (a) What will be the output of following program ?

```
main ( )
```

```
{staticinta[] = {0, 1,2,3,4};
static int *p [ ] = {a, a + 1, a + 2, a + 3, a + 4};
 int * * ptr = p ;
printf("%d%d",a,**p); .
printf (" % d % d", p, * ptr);
}
```

Q1) Determine the outputs of the programs given below.


```
#include<iostream.h>
 #include<conio.h>
 void main()
 {
 clrscr();
   int a=4,b=5,p;
 p =  ++a + a++ - ++b + --b + ++a + b++ + b;
 cout<<"p = "<< p<<"\n";
 cout<<"a= " <<a<<"\n";
cout<<"b = " <<b<< "\n";
 getch();
 }
```

```
p = 28

a= 7
b = 6
```

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
  int a=6,b=8,f;
 float c= 3.5,d = 4.3,e;
 a = e = (c>d)? c:d;
  cout<<"a = "<<a<<"e = "<<e;
 getch();
 }
```

a = 4 e = 4.3

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
 char c = 'A',d = 'C',f='B';
 int  a;
 a = 'c' + d+f;
```

```
cout<<"a = "<<a<<endl<<"d="<<d;
getch();
}
```

```
a = 232
d=C
```

```
#include<iostream.h>
#include<conio.h>
void main()
{
clrscr();

int a=6,b=8,c,d,e;
a=b=c=4;
d = ++a - --b + ++c;
e = d + ++d + -- a + 4;
cout<<"A = "<<a<<"d = "<<d<<"e = "<<e;
getch();
}
```

```
A = 4 d = 8 e = 24
```

```
#include<iostream.h>
```

```
#include<conio.h>

void main()

{

clrscr();

int a=1;

if (a == 1)

cout<<"Value of A is one";

else

cout<<"Value of A is Zero";

getch();

}
```

```
Value of A is one
```

```
#include<iostream.h>
#include<conio.h>
void main()
{
clrscr();
int a=1;

if (a)
cout<<"Value of A is One";
else
cout<<"Value of A is Zero";
getch();
}
```

```
Value of A is One
```

```
#include<iostream.h>
```

```
#include<conio.h>
 void main()
{
clrscr();
 int a=1;
if (!a)
cout<<"Value of A is One";
else
cout<<"Value of A is Zero";
getch();
}
```

Value of A is Zero

```
#include<iostream.h>
 #include<conio.h>
 void main()
 {
 clrscr();
 int a=1,b = 2;
 if (a && b)
 cout<<"Both a and b are nonzero";
 else
 cout<<"Either a or b is zero";
 getch();
```

}

Both a and b are nonzero

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
  int a=1,b = 0 ;
 if (a && b)
 cout<<"Both a and b are nonzero";
 else
 cout<<"Either a or b is zero";
 getch();
 }
```

Either a or b is zero

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
  int a=1,b = 0 ;
 if (a || b)
 cout<<"Either a or b is non zero";
```

```
else
cout<<"Both a and b are  zero";
getch();
}
```

Either a or b is non zero

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
  int a=1,b = 0 ,c = 2,d=0;
 if (!a || b && c || d)
 cout<<"TRUE";
 else
 cout<<"FALSE";
 getch();
 }
```

FALSE

```
#include<iostream.h>
 #include<conio.h>
```

```
 void main()
{
clrscr();
 int a=1,b = 0 ,c = 2,d=0;
if (a || b && c || d+ 3 < c)
cout<<"TRUE";
else
cout<<"FALSE";
getch();
}
```

TRUE

```
#include<iostream.h>
 #include<conio.h>
  void main()
{
clrscr();
 int a=1,b = 0 ,c = 2,d=0;
float e;
a = ++c + --b + c++ + --d;
c = (a>c)? 4.2:3.1;
  cout<<"A = "<<a<<endl<< "C = "<<c;
  getch();
}
```

```
A = 4
C = 3
```

```
#include<iostream.h>
 #include<conio.h>
  void main()
 {
 clrscr();
  int a=1,b = 0 ,c = 2,d=0;
  if ( !((a==b) || (b==d) && (c>a)) )
  cout<<"TRUE";
  else
  cout<<"FALSE";
  getch();
 }
```

```
FALSE
```

```
#include<iostream.h>

 #include<conio.h>

  void main()

 {

 clrscr();

  int a=1,b = 0 ,c = 2,d=0;

  if ( !((a==b) || (b==d) && (c>a)) || c>b )

  cout<<"TRUE";

  else

  cout<<"FALSE";

  getch();

 }
```

```
TRUE
```

```
#include<iostream.h>

#include<conio.h>

void main()

{

int i,j,n;

clrscr();

cout<<"ENTER THE NUMBER OF ROWS"<<endl;

cin>>n;

  for (i=1;i<=n;i++)

          {

          for(j=1;j<=i;j++)

          cout<<"*";

          cout <<endl;

          }

 getch();

}
```

```
ENTER THE NUMBER OF ROWS
*
**
***
****
*****
******
```

```
  #include<iostream.h>
 #include<conio.h>
 void main()
 {
 clrscr();
```

```
for (int i = 1;i<10;i++)
if (i%2 == 0)
continue;
else
cout<<"i = "<<i<<endl;
getch();
}
```

```
i = 1
i = 3
i = 5
i = 7
i = 9
```

PROGRAM

```
#include<iostream.h>
 #include<conio.h>
 void main()
 {
 clrscr();
 for (int i = 1;i<10;i++)
 if (i%2 == 0)
 break;
 else
 cout<<"i = "<<i<<endl;
 getch();
 }
```

```
i = 1
```

PROGRAM

```
#include<iostream.h>
#include<conio.h>
 void main()
{
clrscr();
for (int i = 1;i<4;i++)
for (int j = 1;j<=4;j++)
if (j%2 == 0)
continue;
else
cout<<j<<endl;
getch();
}
```

```
1
3
1
3
1
3
```

Operator Example

- **Write a c++ program to display number of days in calendar format of an entered month of year 2005**

(May 06)

A fomous conjuget holds that all positive integers converges to 1 (one) when treated in the (dec 05)

7)Write a program to generate the following output.

```
ABCDE
ABCD
ABC
AB
A
A
AB
ABC
ABCD
ABCDE
```

Q8)Write a program to generate the following output.

```
*
**
***
****
***
**
*
```

Q9)Write a program to generate the following output.

```
ABCDE   ABCDE
```

```
ABCD     ABCD
ABC       ABC
AB         AB
A           A
A           A
AB         AB
ABC       ABC
ABCD     ABCD
ABCDE   ABCDE
```

Q12)Write a program to generate the following output.

```
     0
    101
   21012
  3210123
 432101234
54321012345
```

Q13)Write a program to check whether the given year is a leap year.

Q14)Write a program using functions to calculate the sine of an angle by accepting the input value in radians.