

Assignment -3

Default constructor

1. create default constructor and display following output("this is default constructor").

Parameterized constructor

2. find area of rectangle using parameterized constructor.

Copy constructor

3. find area of rectangle using copy constructor.

Operator overloading

4. write a c++ program to overload unary operator ++.

5. write a c++ program to overload unary operator --.

6. write a c++ program to overload binary operator +.

7. write a c++ program to overload binary operator -.

8. write a c++ program to overload binary operator *.

9. write a c++ program to overload binary operator /.

10. write a c++ program to overload relational operator ==.(coding is given below)

11. write a c++ program to overload relational operator + =.(coding is given below)

12. write a c++ program to overload relational operator - =.(coding is given below)

13. write a c++ program to overload relational operator !=.(coding is given below)

All are in one programming(all operator)

```
#include<iostream.h>
#include<conio.h>
class Test
{
public:
int a,b;
Test()

{
a=b=0;
}
int operator ==(Test &t)
{
if(t.a==a)
{
return 0;
}
else
{
return 1;
}
}
int operator >= (Test &t)
{
if(t.a>=a)
{
return 0;
}
else
{
return 1;
}
}
int operator <= (Test &t)
{
if(t.a<=a)
{
return 0;
```

```
}  
else  
{  
return 1;  
}
```

```
}  
int operator != (Test &t)  
{  
if(t.a!=a)  
{  
return 0;  
}  
else  
{  
return 1;  
}  
}  
int operator += (Test &t)  
{  
t.a+=a; return t.a;  
}  
int operator -= (Test &t)  
{  
t.a-=a; return t.a;  
}  
int operator *= (Test &t)  
{  
t.a*=a; return t.a;  
}  
int operator &&(Test &t)  
{  
if(t.a&& a)  
{  
return 1;  
}  
else  
{  
return 0;  
}  
}  
int operator || (Test &t)  
{  
if(t.a || a)
```

```
{  
    return 1;  
}  
else  
{  
    return 0;  
}
```

```
}  
};  
void main()  
{
```

```
    Test t1,t2,t3;
```

```
    int num1,num2,num3,num4,num5,num6,num7,num8,num9,num10;  
    clrscr();  
    t1.a=1;  
    t2.a=0;
```

```
    num1=(t1==t2);  
    num2=(t1>=t2);  
    num3=(t1<=t2);  
    num4=(t1!=t2);  
    num5=(t1+=t2);  
    num6=(t1-=t2);  
    num7=(t1*=t2);  
    num9=(t1&& t2);  
    num10=(t1 | t2);
```

```
    cout<<endl<<"num=="<<num1;  
    cout<<endl<<"num>="<<num2;  
    cout<<endl<<"num<="<<num3;  
    cout<<endl<<"num!="<<num4;  
    cout<<endl<<"num+="<<num5;  
    cout<<endl<<"num-="<<num6;  
    cout<<endl<<"num*="<<num7;  
    cout<<endl<<"num&&"<<num9;  
    cout<<endl<<"num | "<<num10;  
    getch();  
}
```