

```
File Edit Search Run Compile Debug Project Options Window Help  
[ ] ABDUL.CPP 1=[t]  
  
#include <iostream.h>  
#include <conio.h>  
  
inline int square(int x){  
    return x*x;  
}  
inline int add(int a,int b=10){  
    return a+b;  
}  
inline int add(int a,int b,int c){  
    return a+b+c;  
}  
void main(){  
    clrscr();  
    cout<<"Square of (5):"<<square(5)<<endl;  
    cout<<"Add (5+Default):"<<add(5)<<endl;  
    cout<<"Add (5+6+7):"<<add(5,6,7)<<endl;  
    getch();  
}  
  
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```

1st Program

Square of (5):25
Add (5+Default):15
Add (5+6+7):18

```
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[ ] ABDUL.CPP 1=[t]  


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

class student{
public:
 int roll;
 void getData(){
 roll=101;
 }
 void showData(){
 cout<<"Roll Number : "<<roll;
 }
};

void main(){
 clrscr();
 student s;
 s.getData();
 s.showData();
 getch();
}
```



* 18:43



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```

2nd Program

Roll Number:101_

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

class Number{
public:
    int a;
};

void display(Number n){
    cout<<"Value:"<<n.a;
}

void main(){
    clrscr();
    Number obj;
    obj.a=50;
    display(obj);
    getch();
}
```

3rd Program

Value:50_

```
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[ ] ABDUL.CPP 1=[t]
#include <iostream.h>
#include <conio.h>

class Sample{
int x;
public:
    Sample() {x = 20;}
    friend void show(Sample s);
};
void show(Sample s){
    cout<<"Value of X:"<<s.x;
}
void main(){
    clrscr();
    Sample obj;
    show(obj);
    getch();
}

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```

4th Program !!

Value of X:20_

```
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[ ] ABDUL.CPP 1=[t]
#include <iostream.h>
#include <conio.h>

class Test{
public:
    int x;
};

void change(Test t){
    t.x=100;
    cout<<"Inside Function:"<<t.x<<endl;
}

void main(){
    clrscr();
    Test obj;
    obj.x=10;
    change(obj);
    cout<<"Outside Function:"<<obj.x;
    getch();
}
```

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5th Program !!

Inside Function:100
Outside Function:10_

```
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[ ] ABDUL.CPP 1=[1]   
#include <iostream.h>  
#include <conio.h>  
  
class Demo{  
public:  
    Demo(){  
        cout<<"Constructor Called" << endl;  
    }  
    ~Demo(){  
        cout<<"Destructor Called";  
    }  
};  
void main(){  
    clrscr();  
    {  
        Demo obj;  
    }  
    getch();  
}
```

* 15:7

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6th Program !!

Constructor Called
Destructor Called

```
= File Edit Search Run Compile Debug Project Options Window Help  
[ ] ABDUL.CPP 1=[+]  
#include <iostream.h>  
#include <conio.h>  
  
class Unary{  
int x;  
public:  
    Unary(int a){x=a;}  
    void operator ++(){  
        x=x+1;  
    }  
    void display(){  
        cout<<"Value = "<<x;  
    }  
};  
void main(){  
    clrscr();  
    Unary obj(10);  
    ++obj;  
    obj.display();  
    getch();  
}  
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```

7th Program !!

Value = 11_

The screenshot shows a C++ IDE interface with the following details:

- Menu Bar:** File, Edit, Search, Run, Compile, Debug, Project, Options, Window, Help.
- Title Bar:** ABDUL.CPP
- Code Editor:** Displays the following C++ code:

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

class Add{
    int a;
public:
    Add(int x){a = x;}
    Add operator + (Add obj){
        return Add (a+obj.a);
    }
    void display(){
        cout<<a;
    }
}
void main(){
    clrscr();
    Add a1(10),a2(20);
    Add a3 = a1 + a2;
    cout<<"Sum is:";
    a3.display();
    getch();
}
```
- Status Bar:** 20:14
- Bottom Bar:** F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu

8th Program !!

Sum is:30_

```
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[ ] ABDUL.CPP 1=[t]=  
#include <iostream.h>  
#include <conio.h>  
  
class A{  
public:  
    void showA(){  
        cout<<"Class A"<<endl;  
    }  
};  
class B:public A{  
public:  
    void showB(){  
        cout<<"Class B";  
    }  
};  
void main(){  
    clrscr();  
    B obj;  
    obj.showA();  
    obj.showB();  
    getch();  
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```

9th(A) Program !!

Class A
Class B_

```
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[ ] ABDUL.CPP 1=[ ]
#include <iostream.h>
#include <conio.h>
class A{
public:
    void showA(){
        cout<<"Class A"<<endl;
    }
};
class B:public A{
public:
    void showB(){
        cout<<"Class B";
    }
};
class C:public B{
public:
    void showC(){
        cout<<"Class C";
    }
};
void main(){
    clrscr();
    C obj;
    obj.showA();
    obj.showB();
    obj.showC();
    getch();
}
* 28:2
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```

9th(B) Program !!

Class A
Class BClass C_

```
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[ ] = ABDUL.CPP = 1=[ ]=
#include <iostream.h>
#include <conio.h>
class A{
public:
    void showA(){
        cout<<"Class A"<<endl;
    }
};
class B{
public:
    void showB(){
        cout<<"Class B";
    }
};
class C:public A,public_B{
};
void main(){
    clrscr();
    C obj;
    obj.showA();
    obj.showB();
    getch();
}
```

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9th(C) Program !!

Class A
Class B

```
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[ ] ABDUL.CPP 1=[t]=  
#include <iostream.h>  
#include <conio.h>  
class Base{  
public:  
    virtual void show(){  
        cout<<"Base Class";  
    }  
};  
class Derived:public Base{  
public:  
    void show(){  
        cout<<"Derived Class";  
    }  
};  
void main(){  
    clrscr();  
    Base *b;  
    Derived d;  
    b=&d;  
    b->show();  
    getch();  
} 22:2
```

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10th Program !!

Derived Class