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**Section: B**

1)

```
#include<iostream>
```

```
#include<string.h>
```

```
using namespace std;
```

```
class student{
```

```
    int roll;
```

```
    char name[20];
```

```
    float marks;
```

```
public:
```

```
    student(int r, char nm[],float m){
```

```
        roll=r;
```

```
        strcpy(name,nm);
```

```
        marks=m;
```

```
    }
```

```
void display(){
```

```
    cout<<"\n\t Roll : "<<roll;
```

```
    cout<<"\n\t Name : "<<name;
```

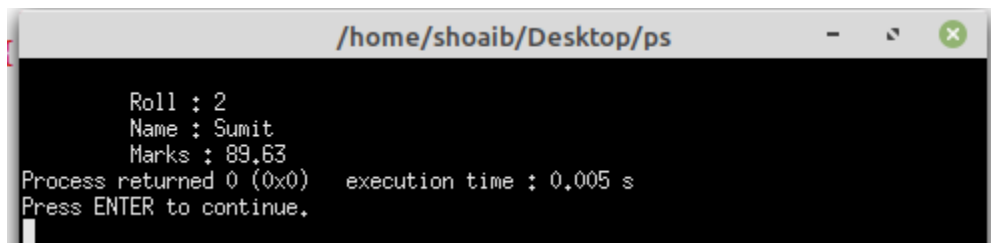
```
    cout<<"\n\t Marks : "<<marks;
```

```
}
```

```
};
```

```
int main(){  
    student s(2,"Sumit",89.63);  
    s.display();  
    return 0 ;  
}
```

Output

A terminal window with a title bar showing the path "/home/shoaib/Desktop/ps". The window has standard Linux window controls (minimize, maximize, close). The terminal output is as follows:

```
Roll : 2  
Name : Sumit  
Marks : 89.63  
Process returned 0 (0x0)   execution time : 0.005 s  
Press ENTER to continue.  
█
```

2)

```
#include<iostream>  
  
#include<string.h>  
  
using namespace std;  
  
class student{  
    int roll;  
    string name;  
    float marks;  
    public:  
        student(int r, string nm,float m){  
            roll=r;  
            name=nm;  
            marks=m;  
        }  
}
```

```
void display(){
    cout<<"\n\t Roll : "<<roll;
    cout<<"\n\t Name : "<<name;
    cout<<"\n\t Marks : "<<marks;
}

};

int main(){
    student s1(2,"Ali",89.63);
    student s2(s1);
    student s3=s1;
    cout<<"\n\t values in object s1";
    s1.display();
    cout<<"\n\t values in object s2";
    s2.display();
    cout<<"\n\t values in object s3";
    s3.display();
    return 0 ;
}
```

**Output**

```
/home/shoaib/Desktop/ps
values in object s1
Roll : 2
Name : Ali
Marks : 89.63
values in object s2
Roll : 2
Name : Ali
Marks : 89.63
values in object s3
Roll : 2
Name : Ali
Marks : 89.63
Process returned 0 (0x0)   execution time : 0.005 s
Press ENTER to continue.
█
```

3)

```
#include<iostream>
```

```
#include<string.h>
```

```
using namespace std;
```

```
class Sum {
```

```
    public:
```

```
        Sum(int l, int m, int n){
```

```
            cout<<"Sum of three integers is = "<<(l+m+n)<<endl;
```

```
        }
```

```
        Sum(int l,int m){
```

```
            cout<<"Sum of two integers is = "<<(l+m)<<endl;
```

```
        }
```

```
};
```

```
int main(){
```

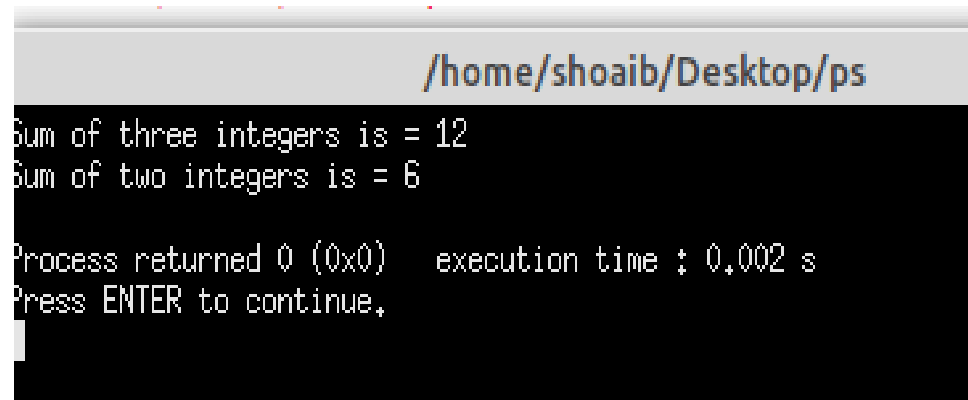
```
    Sum s1=Sum(3,4,5);
```

```
    Sum s2= Sum(2,4);
```

```
    return 0;
```

```
}
```

#### Output

A terminal window with a title bar showing the path /home/shoaib/Desktop/ps. The terminal output displays the results of a C++ program: 'Sum of three integers is = 12' and 'Sum of two integers is = 6'. Below this, it shows 'Process returned 0 (0x0) execution time : 0.002 s' and 'Press ENTER to continue.'.

```
/home/shoaib/Desktop/ps  
Sum of three integers is = 12  
Sum of two integers is = 6  
  
Process returned 0 (0x0) execution time : 0.002 s  
Press ENTER to continue.
```

4)

```
#include<iostream>
```

```
#include<string.h>
```

```
using namespace std;
```

```
class Sum {
```

```
    public:
```

```
        Sum(int l, int m, int n);
```

```
        Sum(int l ,int m);
```

```
};
```

```
int main(){
```

```
    Sum s1=Sum(3,4,5);
```

```
    Sum s2=Sum(2,4);
```

```
    return 0;
```

```
}
```

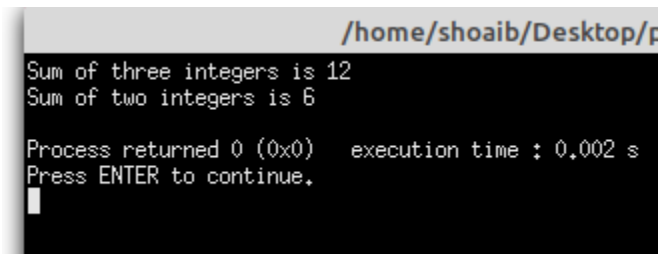
```
Sum::Sum(int l, int m, int n){
```

```

        cout<<"Sum of three integers is "<<(l+m+n)<<endl;
    }
    Sum::Sum(int l,int m){
        cout<<"Sum of two integers is "<<(l+m)<<endl;
    }

```

### Output



```

/home/shoaib/Desktop/p
Sum of three integers is 12
Sum of two integers is 6

Process returned 0 (0x0)   execution time : 0.002 s
Press ENTER to continue.

```

5)

```

#include<iostream>

using namespace std;

class Prog{
public:
    Prog(){
        cout<<"This is constructor function "<<endl;
    }
    ~Prog(){
        cout<<"This is destructor function "<<endl;
    }
};

int main(){
    Prog x;
    int a,b;
    a=10;
    b=20;

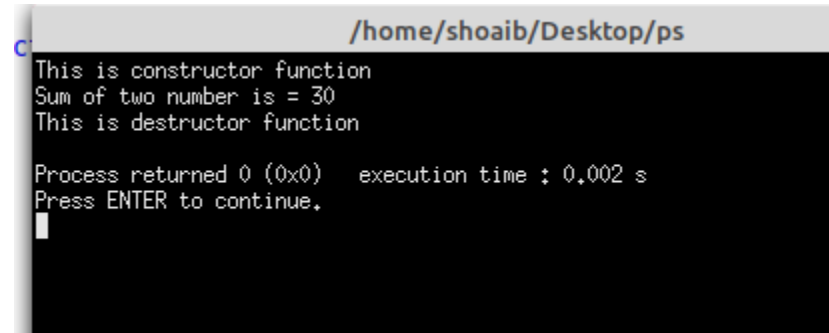
```

```

    cout<<"Sum of two number is = "<<(a+b)<<endl;
}

```

## Output



A terminal window with a dark background and a light gray title bar. The title bar contains the text `/home/shoaib/Desktop/ps`. The terminal output is as follows:

```

This is constructor function
Sum of two number is = 30
This is destructor function

Process returned 0 (0x0)   execution time : 0.002 s
Press ENTER to continue.

```

6)

```

#include<iostream>

using namespace std;

class test{
    private:
        char name[20];
    public:
        void get(){
            cout<<"Enter your name ";
            cin.get(name,20);
        }
        void print (test s){
            cout<<"Name is : "<<s.name<<endl;
        }
};

int main(){

```



```

    test test1,test2;

    test1.get();

    test2.print(test1);

    return 0;

}

```

Output

```

; /home/shoaib/Desktop/ps
Enter your name shoaib
Name is : shoaib

Process returned 0 (0x0)   execution time : 2.573 s
Press ENTER to continue.
me

```

7)

```

#include<iostream>

using namespace std;

class student {

    public:

        double marks;

        student(double m){

            marks = m;

        }

};

void calculate_avg(student s1, student s2){

    double average =(s1.marks+s2.marks);

    cout<<"Average marks = "<<average<<endl;

}

int main(){

    student student1(88.0),student2(56.0);

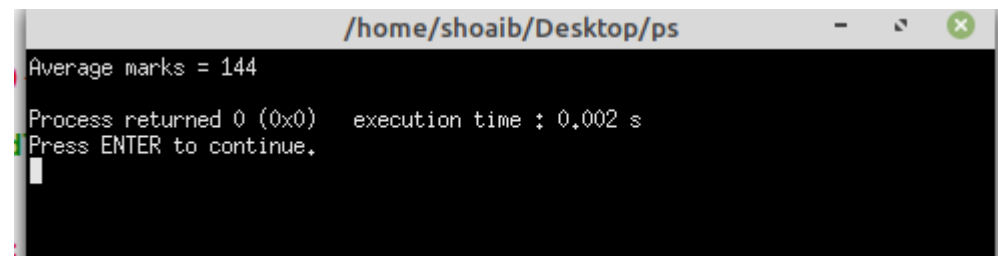
    calculate_avg(student1,student2);

    return 0;
}

```

```
}
```

### Output

A screenshot of a terminal window with a title bar that reads "/home/shoaib/Desktop/ps". The terminal has a black background with white text. The output of the program is displayed as follows:

```
Average marks = 144
Process returned 0 (0x0)   execution time : 0,002 s
Press ENTER to continue.
```

A white cursor is visible on the line "Press ENTER to continue.", positioned at the beginning of the line.