

## **PROGRAM** –

CREATE A CLASS FOR COUNTING THE NUMBER OF OBJECTS CREATED AND DESTROYED WITHIN VARIOUS BLOCKS USING CONSTRUCTOR AND DESTRUCTOR.

**//BHAVNA VERMA - 171210019- 22/01/2019**

```
#include<iostream>
```

```
using namespace std;
```

```
class A
```

```
{  
    static int c1;  //static variable  
    static int c2; //static variable  
public:  
    A() //CONSTRUCTOR  
    {  
        c1++;  
    }  
    ~A() //DESTRUCTOR  
    {  
        c2++;  
    }  
    int getc1()  
    {  
        return c1;  
    }  
    int getc2()  
    {  
        return c2;  
    }  
};
```

```
int A::c1=0;
```

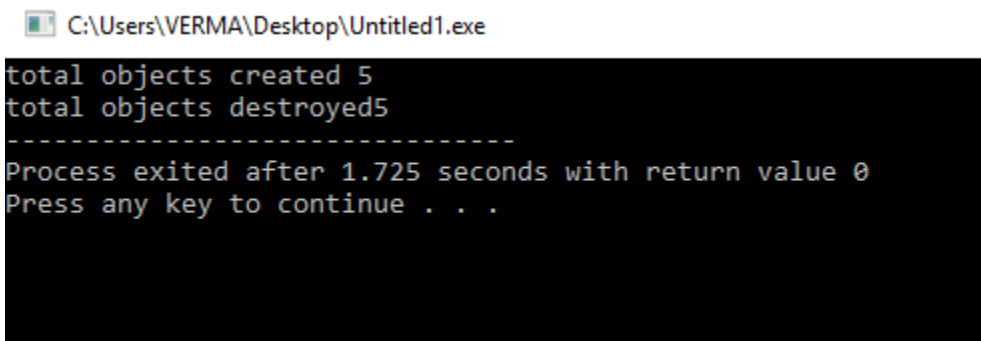
```
int A::c2=0;
```

```
A O3, O4, O5; //OBJECTS CREATED OUTSIDE MAIN FUNCTION
```

```
int main()
```

```
{  
    int x, y;
```

```
A O1,O2; // OBJECTS CREATED  
x=O1.getc1();  
y=O1.getc2();  
cout<<"total objects created "<<x;  
cout<<"\ntotal objects destroyed"<<x;  
return 0;  
}
```



```
C:\Users\VERMA\Desktop\Untitled1.exe  
total objects created 5  
total objects destroyed 5  
-----  
Process exited after 1.725 seconds with return value 0  
Press any key to continue . . .
```

## CONSTRUCTOR –

Constructor is used to initialize the object.

Constructors can take arguments.

Constructor overloading is possible.

Constructor can be of different types like default, parameterized and copy constructor.

## DESTRUCTOR –

Destructor is used to destroy the object that is created in memory and refers to some memory space.

Destructors cannot take arguments.

Destructor overloading is not possible.

Destructor has no types.