**C++ Basic :**

Objects can be created in two situations:

* Statically (Compile time)
* Dynamically (Run time)

You know beforehand that you require 3 objects say, during the run of your program. Then you go like this:

**Statically:**

1. MyClass mc1, mc2, mc3;//default contructor call and call method

/\*Objects mc1,mc2,mc3 of MyClass type has been created\*/

1. MyClass mc[3]; //Array of 3 objects of MyClass type has been created and

//default contructor call and call method using a[0].meth\_name()

**Note:**

MyClass m1();//contructor not called and can not call any method using m1 bz it is just function declaration of type MyClass.

**Dynamically:**

MyClass \*mc=**new** MyClass; **OR** MyClass \*mc=**new** MyClass();//both basically same

Note:

Program:1 create object on stack

*class demo*

*{*

*int x,y;*

*public:*

*demo()*

*{*

*cout<<"Hello"<<endl;*

*}*

*~demo()*

*{*

*cout<<"By"<<endl;*

*}*

*};*

*int main()*

*{*

*demo d;*

*cout<<"word"<<endl;*

*}*

Output:

Hello

Word

By

Program:2 create object on heap(using new)

When you create your object on the heap(using pointer)  you kinda need to delete your class before its destructor is called and memory is freed:

*class demo*

*{*

*int x,y;*

*public:*

*demo()*

*{*

*cout<<"Hello"<<endl;*

*}*

*~demo()*

*{*

*cout<<"By"<<endl;*

*}*

*};*

*int main()*

*{*

*demo \*d=new demo;*

*delete d;//need explicitly then destructor will call otherwise destructor will not call*

*cout<<"word"<<endl;*

*}*

Output

Hello

By

Word

Note:Object can be declared as static in c++.get more detail

**Note:**

Point \*t1, \*t2; // No constructor call

t1 = new Point(10, 15); // Normal constructor call

t2 = new Point(\*t1); // Copy constructor call

Point t3 = \*t1; // Copy Constructor call

Point t4; // Normal Constructor call

t4 = t3; // Assignment operator call

A a1();constructor will not call bz it is function declaration ‘p’.

A a[2]; //call default constuctor