

**Aim: Design Applications using Classes and Objects**

- a) **Write a program to declare a class "staff" having data members as name and post.accept this data 5 staffs and display names of staff who are HOD.**

**SOURCE CODE:**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace P2Staff
{
    class staff
    {
        string name, post;
        public void getdata()
        {
            Console.WriteLine("Enter name and post:");
            name = Console.ReadLine();
            post = Console.ReadLine();
        }
        public void display()
        {
            Console.WriteLine(name + "\t\t" + post);
        }
        public string getPost()
        {
            return post;
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            staff[] objStaff = new staff[5];
            int i;
            for (i = 0; i < 5; i++)
            {
                objStaff[i] = new staff();
                objStaff[i].getdata();
            }
            Console.WriteLine("Name \t\t Post");
        }
    }
}
```

```
        for (i = 0; i < 5; i++)  
        {  
            if (objStaff[i].getPost() == "HOD" || objStaff[i].getPost() == "hod")  
                objStaff[i].display();  
        }  
        Console.ReadLine();  
    }  
}
```

**OUTPUT:**



```
file:///c:/users/admin1/documents/visual studio 2010/Projects/P2Staff/P2Staff/bin/Debug/P2Staff.EXE  
Enter name and post:narender  
student  
Enter name and post:shivkumar goel  
hod  
Enter name and post:mona deskmukh  
exam  
Enter name and post:vaishali ghaty  
class teacher  
Enter name and post:ameya parkar  
mentor  
Name          Post  
shivkumar goel      hod
```

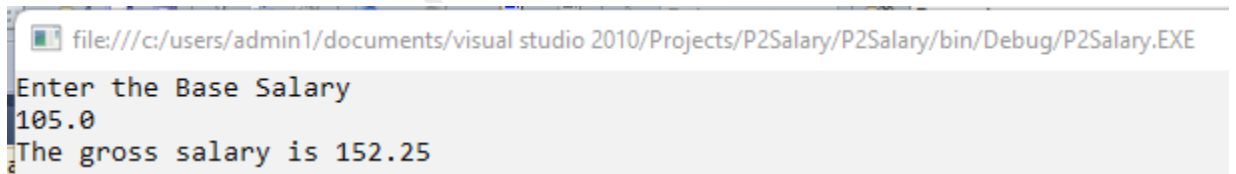
- b) **Define a class "salary" which will contain member variables Basic, TA, DA, HRA. Write a program using Constructor with default values for DA and HRA and calculate the salary of the employee.**

**SOURCE CODE:**

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
  
namespace P2Salary  
{  
    class salary{  
        float bsal, hra, da, ta;  
        float gsal;  
        public void read()  
        {  
            Console.WriteLine("Enter the Base Salary");  
        }  
    }  
}
```

```
        bsal = float.Parse(Console.ReadLine());
    }
    public float sal()
    {
        hra=20*bsal/100;
        da=10*bsal/100;
        ta=15*bsal/100;
        gsal=bsal+da+hra+ta;
        return gsal;
    }
}
class Program
{
    static void Main(string[] args)
    {
        salary s = new salary();
        s.read();
        Console.WriteLine("The gross salary is {0}", s.sal());
        Console.ReadLine();
    }
}
}
```

**OUTPUT:**



```
file:///c:/users/admin1/documents/visual studio 2010/Projects/P2Salary/P2Salary/bin/Debug/P2Salary.EXE
Enter the Base Salary
105.0
The gross salary is 152.25
```

**CONCLUSION:**

From this practical, I have learned about object oriented programming concepts in c#.