```
#include <iostream>

using namespace std;
class Distance
{
   float feet,inch,s_feet,s_inch;
public:
   void getdata()
   {
      cout<<"Enter Distance(feet inch):"<<endl;
      cin>>feet>>inch;
   }

   void view_data()
   {
      cout<<"Distance is:"<<endl;
      cout<<s_feet<<"feet(s)\n"<<s_inch<<"inch(s)"<<endl;
   }
   void add_distance(Distance d1,Distance d2)
   {
      s_inch=d1.inch+d2.inch;
      if(s_inch>=12.0)
      {
         s_feet=d1.feet+d2.feet+(int)(s_inch/12.0);
         s_inch=(s_inch-((int)(s_inch/12.0)*12));
      }
      else
      {
         s_feet=d1.feet+d2.feet;
```

```
        }

    }
};

int main()
{
    Distance d1,d2,d3;

    d1.getdata();
    d2.getdata();
    d3.add_distance(d1,d2);
    d3.view_data();

    return 0;
}
```

```
#include <iostream>

using namespace std;
class number
{
    float num;

public:

    void get_num()

    {

        cout<<"Enter number:\n";

        cin>>num;

    }

    float extract()

    {

        return num;

    }

};


void find_result(float n1, float n2, float n3)

    {

        float ar[3],temp;

        ar[0]=n1;

        ar[1]=n2;

        ar[2]=n3;


        for (int i=0;i<2;i++)

        {

            for(int j=1;j<3;j++)

            {

                if(ar[i]>ar[j])

                {

                    temp=ar[j];

                    ar[j]=ar[i];

                    ar[i]=temp;
                }
            }
        }

        cout<<"Greater Number is: "<<ar[2]<<"\nSmaller Number is: "<<ar[0];

    }

int main()
{
    number n1,n2,n3;

    n1.get_num();
    n2.get_num();
    n3.get_num();

    find_result(n1.extract(),n2.extract(),n3.extract());

    return 0;
}
```

```
#include <iostream>

using namespace std;
class Area
```

```
{
    float len, bre , hei, rad;

public:
    void circle()
    {
        cout<<"Enter radius of circle:\n";
        cin>>rad;
        cout<<"Area of circle is: "<<3.14*rad*rad<<" sq. units."<<endl;
    }

    void triangle()
    {
        cout<<"Enter base and height of triangle:\n";
        cin>>bre>>hei;
        cout<<"Area of triangle is: "<<0.5*bre*hei<<" sq. units."<<endl;
    }

    void square()
    {
        cout<<"Enter length of Square:\n";
        cin>>len;
        cout<<"Area of square is: "<<len*len<<" sq. units."<<endl;
    }

    void rectangle()
    {
        cout<<"Enter length and breadth of rectangle:\n";
        cin>>len>>bre;
        cout<<"Area of rectangle is: "<<len*bre<<" sq. units."<<endl;
    }
};

int main()
{
    char choice;
    Area Shape;
    cout<<"Enter your choice(c, r, t, s):"<<endl;
    cin>>choice;

    switch(choice)
    {
    case 'c':
        Shape.circle();
        break;

    case 't':
        Shape.triangle();
        break;

    case 's':
        Shape.square();
        break;

    case 'r':
        Shape.rectangle();
        break;
    default:
        cout<<"Please enter valid choice!";
        break;
    }



    return 0;
}
```

```
#include <iostream>

using namespace std;

class Store
{
   int store,order;

   public:
```

```
void get_order()
{
    cout<<"Enter the store quantity: ";
    cin>>store;

    cout<<"Enter the order quantity: ";
    cin>>order;
}
void analyse_order()
{
    if(store<order)
    {
        cout<<"No enough quantity";
    }
    else
    {
        if(store<=40)
        {
            if(order>=16)
            {
                cout<<"You cannot order more than 16 item ";
            }
            else
            {
                cout<<"Your order is accepted";
            }
        }
        else
        {
            cout<<"Your order is accepted";
          }
        }

    }
};

int main()
{
   Store order1;

   order1.get_order();
   order1.analyse_order();

   return 0;
}
```

```
#include <iostream>

using namespace std;

class employee
{
    char nam[100],emp_number[20];
    float basic,net_sal,income_tax=30,da=52;

public:
    void get_info()
    {
        cout << "Enter employee id:" << endl;
        cin>>emp_number;
        cout << "Enter employee name:" << endl;
        cin>>nam;
        cout << "Enter employee Basic Salary:" << endl;
        cin>>basic;

    }

    void com_net_sal()
    {

        net_sal=basic+((da/100)*basic)-((income_tax/100)*(basic+(da/100)*basic));
        cout << "Net salary of "<<nam<<" is "<< net_sal<< endl;
    }
};

int main()
{
    cout << "Enter number of employee:" << endl;
    int emp_num;
    cin>>emp_num;
    employee emp[emp_num];

    for(int i=0; i<emp_num;i++)
    {

        emp[i].get_info();
    }

    for(int i=0; i<emp_num;i++)
    {

        emp[i].com_net_sal();
    }

    return 0;
}
```

```
#include <iostream>

using namespace std;

class employee
{
    static int eng_count,mng_count;
    char id[20],nam[100],deg;

public:
    void get_info()
    {
        cout << "Enter employee id:" << endl;
        cin>>id;
        cout << "Enter employee name:" << endl;
        cin>>nam;
        cout << "Enter employee Post\nEngineer- e\nManager-m:\nOther-0" << endl;
        cin>>deg;
        if(deg=='e')
        {
            eng_count++;
        }
        else if(deg=='m')
        {
            mng_count++;
        }
    }

    static int num_eng()
    {
        return eng_count;
    }
    static int num_mng()
    {
        return mng_count;
    }


};
int employee::eng_count;
int employee::mng_count;

void show_count(int eng_count, int mng_count, int emp_count)
    {
        cout<<"Total number of Engineer is "<<eng_count<<"\nTotal number of Manager is "<<mng_count<<"\nOther:"<<emp_count-(eng_count+mng_count);
        cout<<"\nTotal number of Employee is: "<<emp_count;
    }

int main()
{
    cout << "Enter number of employee:" << endl;
    int emp_num,coun[2];
    cin>>emp_num;
    employee e[emp_num];

    for (int i=0;i<emp_num;i++)
    {
        e[i].get_info();
        coun[0]=e[i].num_eng();
        coun[1]=e[i].num_mng();
    }
    show_count(coun[0],coun[1],emp_num);
    return 0;
```

```
}
```