ASSIGNMENT 6

CODE:

```
#include<iostream.h>
#include<conio.h>
#include<math.h>
class polar
     {
      float radius,angle;
     public:
     void getdata();
      polar operator+(polar);
      void display();
      };

 void polar::getdata()
 { cout<<"Enter the radius=";
   cin>>radius;
   cout<<"Enter the angle=";
   cin>>angle;
   }

  polar polar::operator+(polar b)
  {
   polar o;
    float x=radius*cos(angle) +(b.radius)*cos(b.angle);
    float y=radius*sin(angle) +(b.radius)*sin(b.angle);

    o.radius=sqrt(x*x+y*y);
    o.angle=atan(y/x);
    return (o);
```

```
    }

void polar:: display()
    {

 cout<<"\n\nRadius:"<<radius;
 cout<<"\n\nAngle:"<<angle;
}

 void  main()
        {
        polar a,b,c;
        a.getdata();
        b.getdata();
        c=a+b;
        c.display();
        getch();
        }
```

OUTPUT: