```
#include<stdio.h>
#include<math.h>
#define PI 3.142857
int main()
{
        float x,degree,nume,deno,sum,term;
        int i;

        printf("Enter degree:");
        scanf("%f",&degree);
        x=degree*(PI/180.0);
        sum=0;
        nume=x;
                deno=1.0;
                i=1;

                do
                {
                        term=nume/deno;
                        sum=sum+term;
                        i=i+2;

                  nume=-nume*x*x;
                  deno=deno*i*(i-1);

                } while (fabs(term) >= 0.00001);

        printf("Computed value of Sin(%f)=%f\n",degree,sum);

printf("Value from library function is sin(%f) = %f\n",degree,sin(x));
```

```
                return 0;
}
```

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Output:

```
$ cc taylor.c -lm
$./a.out
Enter degree:30
Computed value of sin(30.000000)=0.500182
Value from library function is sin(30.000000) =0.500182

$./a.out
Enter degree:60
Computed value of sin(60.000000)=0.866236
Value from library function is sin(60.000000) =0.866236

$./a.out
Enter degree:90
Computed value of sin(90.000000)=1.000000
Value from library function is sin(90.000000) =1.000000
```