

```

1  #include <stdio.h>
2  #include <math.h>
3  int main()
4  {
5      int j,n,x, sign=-1;
6      float radX,sum=0.0;
7      long factorial(num){
8          int i;
9          long fact = 1;
10         for(i=1;i<=num;i++){
11             fact *= i;
12         }
13         return fact;
14     }
15     printf("Enter value of n: \t");
16     scanf("%d",&n);
17     printf("Enter value of x: \t");
18     scanf("%d",&x);
19     radX = x * 3.1415 / 180;
20     for(j=1;j<=n;j+=2){
21         sign *= -1;
22         sum += sign * (pow(radX,j)/factorial(j));
23     }
24     printf("Sin(%d) = %f",x,sum);
25     printf("Sin(%d) = %f",x,sin(radX));
26     return 0;
27 }
28

```