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/*PROGRAM TO FIND COS(X) USING FUNCTION*/
#include <stdio.h>

double COS(double x)
{
    x = x * 3.1415 / 180.0;
    double result = 1;
    double sign = 1, fact = 1, pow = 1;
    for (int i = 1; i <= 10; i++)
    {
        sign = sign * -1;
        fact = fact * (2 * i - 1) * (2 * i);
        pow = pow * x * x;
        result = result + sign * pow / fact;
    }
    return result;
}

int main()
{
    printf("20BCS065  RAVI GOWRI JASWANTH\n");

    for (double i = 0; i <= 180; i += 30)
    {
        printf("cos(%.0lf) = %.3lf\n", i, COS(i));
    }
}

```