

Circle

Lastname_PACircle.c

Write a program that calculates a circle's area or circumference.

PROGRAM DESIGN

The program should accept two inputs from the user. The first input (an integer), should determine what type of computation should be executed (calculate the area of a circle, or calculate its circumference). The second input (a floating point), is the diameter of the circle. For these circular computations, use the constant value for π (at 3.14159). NOTE: you may use as many variables as you deem necessary for the program. Save your program as *Lastname_PACircle.c* (example: **Ablazo_Circle.c**)

PROGRAM SKELETON

```
#include <stdio.h>
#define PI 3.14159

int main()
{
    float dm, comp;
    int choice;

    scanf("%d %f", &choice, &dm);

    /* build your program here */

    return 0;
}
```

INPUT

Each line of input contains an integer value and a floating-point, which are separated by a space. The first indicates the type of formula or computation to be done, that is, 1 Area of a Circle and 2 for Circumference of a Circle.

OUTPUT

Your program should print a floating-point number (result of the computation) with a 2 decimal precision in a single line for each corresponding line of input. Furthermore, if the first value indicated in the input is a value other than 1 or 2, your program should print the line "Invalid Input" for that line.

SAMPLE INPUT

```
1 10
2 10
5 15
1 5
2 14
```

SAMPLE OUTPUT

```
78.54
31.42
Invalid Input
19.63
43.98
```