# Assignment9: Circle

**Due: November, 11, 2021 (Thursday)**

## Objective

This assignment to make you familiar with the basic concepts of functions.

Code : circle.cpp
Input : none
Output : none

## Assignment: Circumference of a Circle

Write a program that takes a positive number from user as the radius of a circle and calculate its circumference. Your program then outputs the given radius and the calculated circumference on the screen (see the sample output).

To complete this, you must write and use 5 functions. Function prototypes are as shown below.

**1. void greet();**

The greet() function displays a greeting message on the screen (see the sample output).
Note: This function takes nothing; returns nothing.

**2. float readRadius();**

readRadius() function reads a user input for radius and make sure it is positive if it is negative, keep asking until a positive number is entered
Note: This function takes nothing; returns a floating-point value.

**3. float findCircumf (float radius);**

**findCircumf() function** calculates and return the circumference of the circle. The radius is passed as a parameter.
Note: This function takes a float-point value; returns a floating-point value.

**4. void printResult(float radius, float circumf);**

**printResult() function** takes the radius and circumference as parameters and output them on the screen.
Note: This function takes two float-point values; returns nothing.

**5. void signoff();**

**signoff() function** outputs a signoff message on the screen (see the sample output)
Note: This function takes nothing; returns nothing.

The main() function should call these functions and arrange the flow of the program to get the output similar to the sample output.
In the main() function,

- First, call the greet() function. Since it does not return a value, the function call is not assigned to a variable. The greet() function does not have any parameters, so the parenthesis will be empty.
- Next, the main() calls the readRadius(). It returns a floating point value. So, the function call should be assigned to a variable defined in the main().
- Third, the findCircumf() function should be called. This function has one parameter, so one argument (the value returned by the previous function call) should be passed in. The function would return the circumference, so use a variable to assign the findCircumf () function into.
- Call the remaining two functions appropriately.

## Sample Output

```
Welcome to circumference calculation program
You enter the radius; I'll find the circumference of the circle

Please enter a positive radius :0
Please enter a positive radius :-2.2
Please enter a positive radius :3.21

You entered the radius  :3.21
The circumference of the circle  : 20.1684

Have A Good Day!
```