

Assignment-1

1. Calculate and print

- (i) n-th term of a arithmetic series and
- (ii) sum up to n-th term.

input : first term, common difference, value of n

output: n<integer>-th term is: <term>

sum up to n<integer>-th term is: <sum> [2]

2. A square is made by bending a single piece of wire.

If we make a circle out of this wire, what will be radius and area of the circle?

Assume the value of "pi" to be 3.14.

input: length of one side of the square

output: Radius of the circle is:

Area of the circle is: [2]

3. Given two integers stored in variables C and D, interchange (swap) the contents of C and D. DO NOT USE ANY TEMPORARY VARIABLE. [2]

input: values of variables C and D

output: Value of C after swap:

Value of D after swap: [2]

4. Suppose you are given the coordinates of the three vertices of an equilateral triangle on the Cartesian plane. Calculate the coordinates of the centre

and the area of the circle inscribed in the triangle. Assume the value of "pi" to be 3.14. [4]

input: coordinates of the vertices of the triangle

output: Coordinates of incentre:

Area of the incircle: [2]