

ME-172  
Computer Programming Language Sessional

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## Problem 1

Write a Program to find the Area of a Circle. [NOTE: radius should be scanned from the keyboard]

### Solution:

```
/**
 * Calculates the area of a circle
 */

#include <stdio.h>
#include <math.h>

int main(void)
{
    const float pi = 3.1416;
    float radius, area;

    // Take user input for radius.
    printf("Enter radius: ");
    scanf("%f", &radius);

    // Calculate area.
    area = pi * pow(radius, 2);

    // Print output.
    printf("Area: %.2f\n", area);
}
```

## Problem 2

Write a Program to compute average of four user given numbers (numbers can be of integer or floating types)

## Solution:

```
/**
 * Computes average of four user given numbers.
 */

#include <stdio.h>

int main(void)
{
    // Allocating memory to store 4 numbers.
    const int count = 4;
    float numbers[count];

    // Prompt user for input
    printf("Enter four numbers: \n");
    for (int i = 0; i < count; i++)
    {
        scanf("%f", numbers + i);
    }

    // Calculate average
    float sum = 0;
    for (int i = 0; i < count; i++)
    {
        sum += numbers[i];
    }
    float avg = sum / count;

    // Print output
    printf("Average of ");
    for (int i = 0; i < count; i++)
    {
        if (i == count - 1)
        {
            printf(", and ");
        }
    }
}
```

```
        else if (i)
        {
            printf(", ");
        }
        printf("%.2f ", numbers[i]);
    }
    printf(" is: %.2f\n", avg);
}
```