



**Programing Fundamental (LAB)**

**Submitted by : Muhammad Taha**

**Submitted to : Muhammad Saood Sarwar**

**Roll no : (23P-0559)**

## Quizz : 01

### Question no : 01

#### **Input:**

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    float pi = 3.14159;
```

```
    float v,r,h;
```

```
    // Enter the radius and height of the cylinder in meters
```

```
    printf("Enter the radius of the cylinder base in (meters):\n");
```

```
    scanf("%f",&r);
```

```
    printf("Enter the height of the cylinder in (meters):\n");
```

```
    scanf("%f",&h);
```

```
    // calculate the volume
```

```
    v = 3.14159*(r*r)*h;
```

```
    // print the volume
```

```
    printf("The Volume of the cylinder is = %f\n",v);
```

```
    return 0;
```

```
}
```

## Output:

```
ahad@ahad-Latitude-7490:~/Taha$ gcc Task1.c
ahad@ahad-Latitude-7490:~/Taha$ ./a.out
Enter the radius of the cylinder base in (meters):
5
Enter the height of the cylinder in (meters):
10
The Volume of the cylinder is = 785.397522
ahad@ahad-Latitude-7490:~/Taha$
```

## Question no : 02

### Input:

```
#include <stdio.h>

int main() {
    float Side1, Side2, height, area, perimeter;

    // Enter the lengths of the parallel sides and height
    printf("Enter the length of the first parallel side (in units): ");
    scanf("%f", &Side1);

    printf("Enter the length of the second parallel side (in units): ");
    scanf("%f", &Side2);

    printf("Enter the height (in units): ");
    scanf("%f", &height);

    // Calculate the area of the trapezoid
    area = 0.5 * (Side1 + Side2) * height;

    // Calculate the perimeter of the trapezoid
    perimeter = Side1 + Side2 + 2 * height;

    // Display the results in units
    printf("Area of the trapezoid: %f square units\n", area);
    printf("Perimeter of the trapezoid: %f units\n", perimeter);

    return 0;
}
```

## Output:

```
Enter the length of the first parallel side (in units): 6.5
Enter the length of the second parallel side (in units): 8.2
Enter the height (in units): 4.3
Area of the trapezoid: 31.605001 square units
Perimeter of the trapezoid: 23.299999 units
ahad@ahad-Latitude-7490:~/Taha$
```