

# Problem 1

Problem: Write a C program to enter two numbers and perform all arithmetic operations. (+, -, \*, /, %).

Solution:

## Source Code

```
rt here  exercise1.c
1  #include<stdio.h>
2
3  int main()
4  {
5      int a, b;
6      printf("Enter two numbers: ");
7      scanf("%d %d", &a, &b);
8
9      printf("Addition: %d\n", a+b);
10     printf("Subtraction: %d\n", a-b);
11     printf("Multiplication: %d\n", a*b);
12     printf("Division: %f\n", (float)a/b);
13     printf("Modulus: %d", a%b);
14
15     return 0;
16 }
17
```

## Input & Output

```
/home/parvej/Documents/CSE Lab Report/Lab...
Enter two numbers: 12 5
Addition: 17
Subtraction: 7
Multiplication: 60
Division: 2.400000
Modulus: 2
Process returned 0 (0x0)   execution time : 5.218 s
Press ENTER to continue.
```

## Problem 2

Problem: Write a C program to enter length and breadth of a rectangle and find its area.

Solution:

### Source Code

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int length, breadth, area;
6
7     printf("Enter the length and breadth of a rectangle: ");
8     scanf("%d %d", &length, &breadth);
9     area=length*breadth;
10
11     printf("Area: %d", area);
12
13     return 0;
14 }
15
```

### Input & Output

```
/home/parvej/Documents/CSE Lab Report/Lab...
Enter the length and breadth of a rectangle: 5 10
Area: 50
Process returned 0 (0x0)   execution time : 4.490 s
Press ENTER to continue.

```

## Problem 3

Problem: Write a C program to enter temperature in Celsius and convert it into Fahrenheit.

Solution:

### Source Code

```
ere x *exercise3.c x
1  #include<stdio.h>
2  int main()
3  {
4      float celsius, fahrenheit;
5      printf("Enter the temperature in celsius: ");
6      scanf("%f", &celsius);
7      fahrenheit=(9/5)*celsius+32;
8
9      printf("Fahrenheit: %f", fahrenheit);
10
11     return 0;
12 }
13
```

### Input & Output

```
/home/parvej/Documents/CSE Lab Report/Lab...
Enter the temperature in celsius: 36,6
Fahrenheit: 68,599998
Process returned 0 (0x0)   execution time : 4,889 s
Press ENTER to continue.

```

## Problem 4

Problem: Write a C program to enter base and height of a triangle and find its area.

Solution:

### Source Code

```
1 #include<stdio.h>
2
3 int main()
4 {
5     float base, height, area;
6     printf("Enter the base and height of the triangle: ");
7     scanf("%f %f", &base, &height);
8     area=.5*base*height;
9
10    printf("Area: %f", area);
11
12    return 0;
13 }
14
```

### Input & Output

```
/home/parvej/Documents/CSE Lab Report/Lab...
Enter the base and height of the triangle: 12 4
Area: 24.000000
Process returned 0 (0x0)   execution time : 6.255 s
Press ENTER to continue.
```

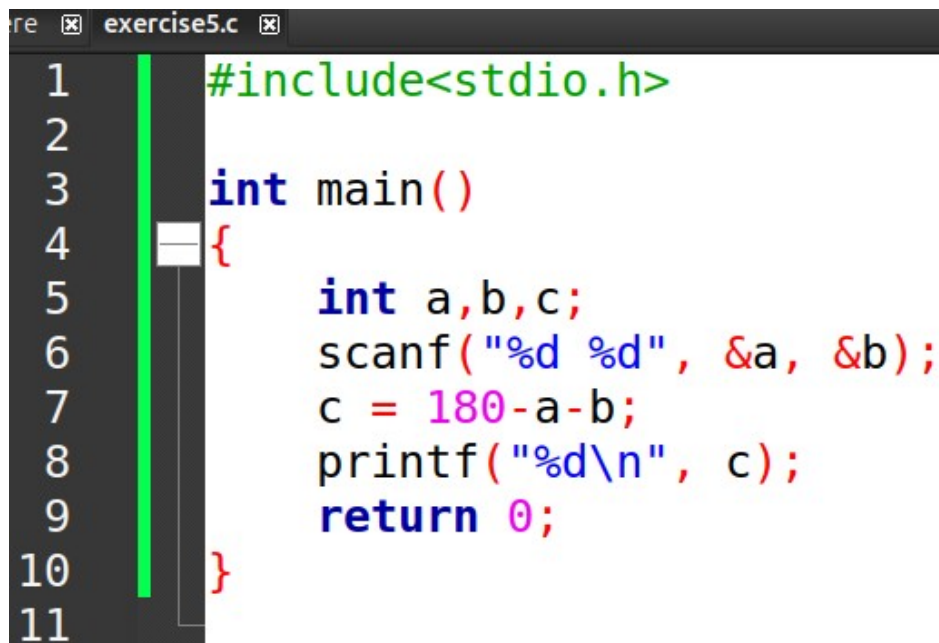
## Problem 5

- Write the following code on your compiler. List the errors, if any. Find the reasons behind this errors,

```
#include<stdio.h>

int main()
{
    int a,b,c;
    scanf("%d %d", a, &b);
    c= 180-a-b
    printf("%d\n", &c);
    return 0;
}
```

### Corrected Code:



```
1 #include<stdio.h>
2
3 int main()
4 {
5     int a,b,c;
6     scanf("%d %d", &a, &b);
7     c = 180-a-b;
8     printf("%d\n", c);
9     return 0;
10 }
11
```

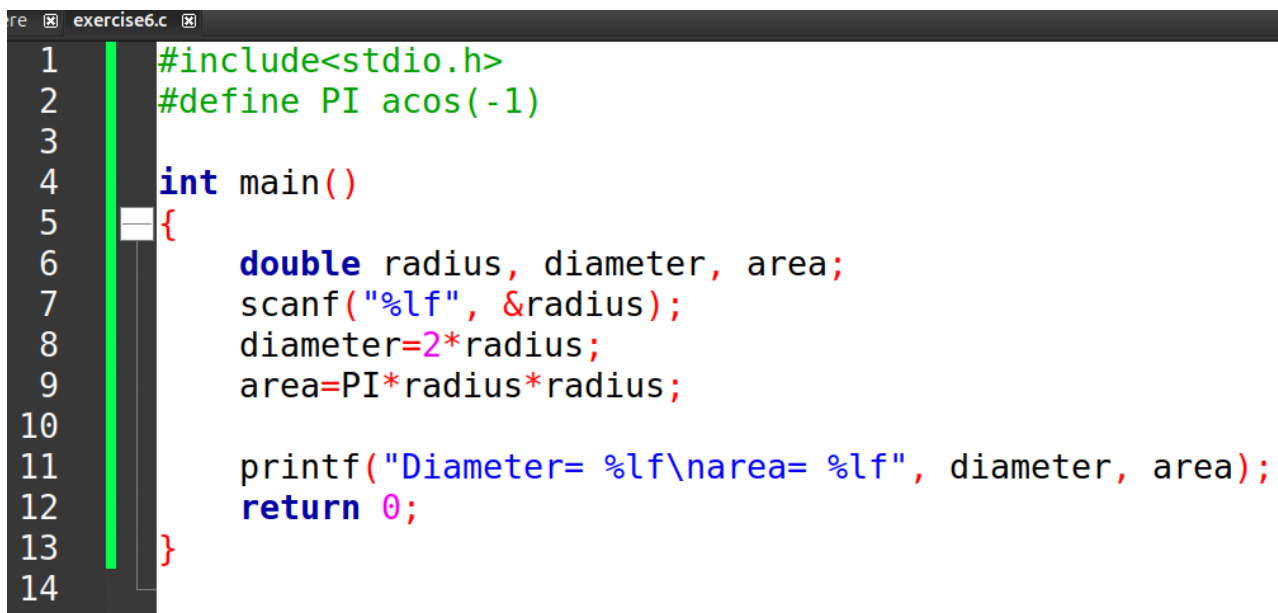
## Problem 6

- Write the following code on your compiler. List the errors, if any. Find the reasons behind these errors,

```
#include<stdio.h>
#define PI acos(-1) // constant value
int main()
{
    double radius, diameter;
    scanf("%lf",& &radius);
    diameter = 2*radius;
    area = PI*radius*radius;

    printf("Diameter = %d\narea = %d", diameter, area);
    return 0;
}
```

### Corrected Code:



```
1 #include<stdio.h>
2 #define PI acos(-1)
3
4 int main()
5 {
6     double radius, diameter, area;
7     scanf("%lf", &radius);
8     diameter=2*radius;
9     area=PI*radius*radius;
10
11     printf("Diameter= %lf\narea= %lf", diameter, area);
12     return 0;
13 }
14
```