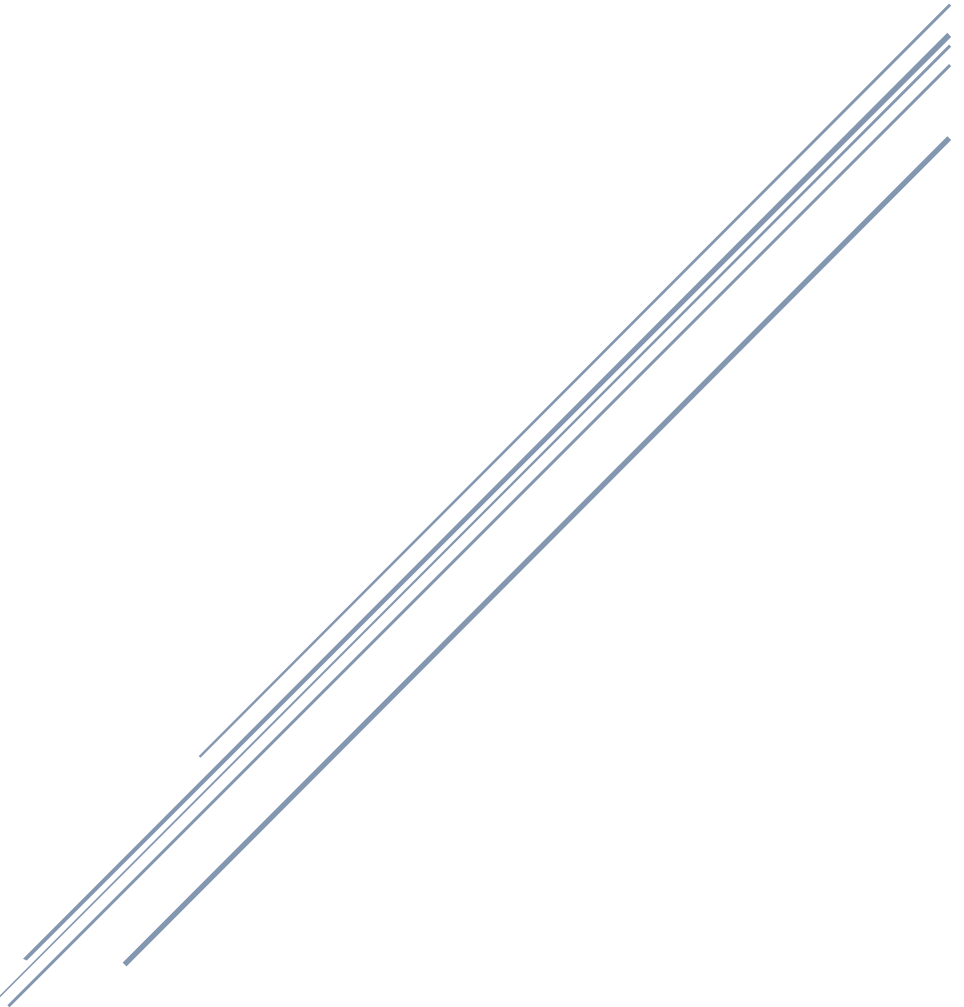


ASSIGNMENT 1

Lecture 3

C-Programming
ENG/Mostafa Hassan Aboshaker



EX1:

Write C Program to Print a Sentence

i should see the Console as following:

#####Console-output###

C Programming

#####

```
1 #include <stdio.h>
2
3 int main() {
4     printf("C Programming\n");
5     return 0;
6 }
7
```

#####

EX2:

Write C Program to Print a Integer Entered by a User

i should see the Console as following:

#####Console-output###

Enter a integer: 25

You entered: 25

#####

```
1 #include <stdio.h>
2
3 int main() {
4     int Input;
5     printf("Enter an integer: ");
6     scanf("%d",&Input);
7     printf("You entered: %d\n",&Input);
8     return 0;
9 }
10
```

#####

EX3:

Write C Program to Add Two Integers

i should see the Console as following:

#####Console-output###

Enter two integers: 12

11

Sum: 23

#####

```
#include <stdio.h>

int main() {
    int num1, num2, sum;
    printf("Enter two integers: ");
    scanf("%d %d", &num1, &num2);
    sum = num1 + num2;
    printf("Sum: %d\n", sum);
    return 0;
}
```

#####

EX4:

Write C Program to Multiply two Floating Point Numbers

i should see the Console as following:

#####Console-output###

#####

Enter two numbers: 2.4

1.1

Product: 2.640000

```
#include <stdio.h>

int main() {
    float num1, num2, product;
    printf("Enter two numbers: ");
    scanf("%f %f", &num1, &num2);
    product = num1 * num2;
    printf("Product: %.6f\n", product);
    return 0;
}
```

#####

EX5:

Write C Program to Find ASCII Value of a Character

#####Console_output#####

Enter a character: G

ASCII value of G = 71

#####

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

```
int main() {  
    char character;  
    printf("Enter a character: ");  
    scanf(" %c", &character);  
    printf("ASCII value of %c = %d\n", character, character);  
    return 0;  
}
```

#####

EX6:

Write Source Code to Swap Two Numbers

#####Console_output#####

Enter value of a: 1.20

Enter value of b: 2.45

After swapping, value of a = 2.45

After swapping, value of b = 1.2

#####

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

```
int main() {  
    double a, b, temp;  
    printf("Enter value of a: ");  
    scanf("%lf", &a);  
    printf("Enter value of b: ");  
    scanf("%lf", &b);  
    temp = a;  
    a = b;  
    b = temp;  
  
    printf("After swapping, value of a = %.2lf\n", a);  
    printf("After swapping, value of b = %.2lf\n", b);  
  
    return 0;  
}
```

#####

EX7:

it is an interview trick

Write Source Code to Swap Two Numbers without temp variable.

```
1 #include <stdio.h>
2
3 int main() {
4     double a, b;
5     printf("Enter value of a: ");
6     scanf("%lf", &a);
7
8     printf("Enter value of b: ");
9     scanf("%lf", &b);
10
11     a = a + b;
12     b = a - b;
13     a = a - b;
14
15     printf("After swapping, value of a = %.2lf\n", a);
16     printf("After swapping, value of b = %.2lf\n", b);
17
18     return 0;
19 }
20
```