

1- Write a program using a for loop to print the message "Hello Gammal Tech" 10 times.

قم بكتابة برنامج باستخدام حلقة for طباعة الرسالة Hello Gammal Tech 10 مرات.

Output

```
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
```

Solution

```
● ● ●
#include <stdio.h>

int main() {
    // Using a for loop to print the message 10 times
    for (int i = 0; i < 10; i++) {
        printf("Hello Gammal Tech\n");
    }

    return 0;
}
```

2- Write a program that prompts the user to enter a number and then prints the message "Hello Gammal Tech" as many times as the entered number

كتابة برنامج يطلب من المستخدم إدخال رقم ومن ثم طباعة رسالة "Hello Gammal Tech" بعدد مرات الرقم المدخل

Input

```
Enter a number: 5
```

Output

```
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
Hello Gammal Tech
```

Solution

```
#include <stdio.h>

int main() {
    int number;

    // Prompt the user to enter a number
    printf("Enter a number: ");
    scanf("%d", &number);

    // Using a for loop to print the message based on the entered number
    for (int i = 0; i < number; i++) {
        printf("Hello Gammal Tech\n");
    }

    return 0;
}
```

3- Write a program using a for loop to print numbers from 1 to 5.

اكتب برنامج باستخدام حلقة for لطباعة الأرقام من 1 إلى 5.

Output

```
1
2
3
4
5
```

Solution

```
#include <stdio.h>

int main() {
    // Using a for loop to print numbers from 1 to 5
    for (int i = 1; i <= 5; i++) {
        printf("%d\n", i);
    }

    return 0;
}
```

4- Write a program using a for loop to print numbers from 1 to a number entered by the user.

اكتب برنامج باستخدام حلقة for لطباعة الأرقام من 1 إلى الرقم الذي أدخله المستخدم.

Input

```
Enter a number: 6
```

Output

```
1
2
3
4
5
6
```

Solution

```
#include <stdio.h>

int main() {
    int userInput;

    // Prompt the user to enter a number
    printf("Enter a number: ");
    scanf("%d", &userInput);

    // Using a for loop to print numbers from 1 to the user-entered number
    for (int i = 1; i <= userInput; i++) {
        printf("%d\n", i);
    }

    return 0;
}
```

5- Write a program using a for loop to print the message "Hello Gammal Tech" with numbers.

اكتب برنامج باستخدام حلقة for لطباعة الرسالة "Hello Gammal Tech" بالأرقام.

Output

```
1. Hello Gammal Tech
2. Hello Gammal Tech
3. Hello Gammal Tech
4. Hello Gammal Tech
5. Hello Gammal Tech
```

Solution

```

#include <stdio.h>

int main() {
    // Using a for loop to print the message with numbers
    for (int i = 1; i <= 5; i++) {
        printf("%d. Hello Gammal Tech\n", i);
    }

    return 0;
}
```

6- Write a program using a for loop to create a multiplication table for the number 5.

اكتب برنامج باستخدام حلقة for لإنشاء جدول ضرب للرقم 5.

Output

```

Multiplication Table for 5:
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

Solution

```
#include <stdio.h>

int main() {
    int number = 5;

    printf("Multiplication Table for 5:\n");

    // Using a for loop to create the multiplication table for 5
    for (int i = 1; i <= 10; i++) {
        printf("%d x %d = %d\n", number, i, number * i);
    }

    return 0;
}
```

7- Write a program using a for loop to create a multiplication table for a user-entered number.

اكتب برنامج باستخدام حلقة for لإنشاء جدول ضرب لرقم يدخله المستخدم.

Input

Enter a number to generate its multiplication table: 3

Output

```
Multiplication Table for 3:
3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30
3 x 11 = 33
3 x 12 = 36
```

Solution

```
#include <stdio.h>

int main() {
    int number;

    // Prompt the user to enter a number
    printf("Enter a number to generate its multiplication table: ");
    scanf("%d", &number);

    printf("Multiplication Table for %d:\n", number);

    // Using a for loop to create the multiplication table for the entered number
    for (int i = 1; i <= 12; i++) {
        printf("%d x %d = %d\n", number, i, number * i);
    }

    return 0;
}
```

8- Write a program to print the numbers from 10 to -10 using a for loop.

اكتب برنامج لطباعة الأرقام من 10 إلى -10 باستخدام حلقة for.

Output

```
Numbers from 10 to -10:
10
9
8
7
6
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
-7
-8
-9
-10
```

Activate Windows
Go to Settings to activate Windows.

Solution

```
#include <stdio.h>

int main() {
    // Using a for loop to print numbers from 10 to -10
    printf("Numbers from 10 to -10:\n");
    for (int i = 10; i >= -10; i--) {
        printf("%d\n", i);
    }

    return 0;
}
```

9- Write a program that prompts the user to enter a number and then prints the numbers from the entered number to 1 using a for loop.

اكتب برنامج يطلب من المستخدم إدخال رقم ثم يطبع الأرقام من الرقم الذي تم إدخاله إلى 1 باستخدام حلقة for.

Input

```
Enter a number: 6
```

Output

```
Numbers from 6 to 1:
6
5
4
3
2
1
```


Solution

```
#include <stdio.h>

int main() {
    int userNumber;

    // Prompt the user to enter a number
    printf("Enter a number: ");
    scanf("%d", &userNumber);

    // Using a for loop to print numbers from the entered number to 1
    printf("Numbers from %d to 1:\n", userNumber);
    for (int i = userNumber; i >= 1; i--) {
        printf("%d\n", i);
    }

    return 0;
}
```

10- Write a program using if and for to print numbers from 1 to 5, but only if they are greater than 2.

اكتب برنامج باستخدام if و for لطباعة الأرقام من 1 إلى 5، ولكن فقط إذا كانت أكبر من 2.

Output

```
3
4
5
```

Solution



```
#include <stdio.h>

int main() {
    // Using a for loop to iterate from 1 to 5
    for (int i = 1; i <= 5; i++) {
        // Using an if statement to print the current number only if it's greater than 2
        if (i > 2) {
            printf("%d\n", i);
        }
    }

    return 0;
}
```
