

# Week 4 : Assignment 4

The due date for submitting this assignment has passed.

**Due on 2023-08-23, 23:59 IST.**

Assignment submitted on 2023-08-23, 21:52 IST

**1 point**

What is the purpose of the "if-else" statement in C?

- ☒ a) To execute a block of code repeatedly.
- ☐ b) To declare variables and constants.
- ☐ c) To test a condition and execute different code based on the result.
- ☐ d) To perform mathematical calculations.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*c) To test a condition and execute different code based on the result.*

**1 point**

What is the correct syntax for an "if-else" statement in C?

- ☒ a) if condition { statement1; statement2; } else { statement3; }
- ☐ b) if condition then { statement1; } else { statement2; }
- ☐ c) if (condition) { statement1; } else { statement2; }
- ☐ d) if condition then statement1; else statement2;

Yes, the answer is correct.

Score: 1

Accepted Answers:

*c) if (condition) { statement1; } else { statement2; }*

**1 point**

Which of the following is true about nested "if-else" statements?

- ☒ a) They are not allowed in C.
- ☐ b) The "else" part is mandatory for every "if" statement.
- ☐ c) They allow you to test multiple conditions and execute different blocks of code based on the results.
- ☐ d) Nested "if-else" statements are only allowed up to two levels deep.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*c) They allow you to test multiple conditions and execute different blocks of code based on the results.*

**1 point**

What happens if there is no "else" part in an "if-else" statement?

- ☒ a) The program will not compile.
- ☐ b) The program will crash at runtime.

- ☐ c) If the condition is true, nothing happens; if the condition is false, the program crashes.
- ☐ d) If the condition is true, the program executes the code inside the "if" block; if the condition is false, nothing happens.

Yes, the answer is correct.

Score: 1

Accepted Answers:

*d) If the condition is true, the program executes the code inside the "if" block; if the condition is false, nothing happens.*

**1 point**

Which of the following operators can be used to combine multiple conditions in an "if" statement?

- ☐ a) && (logical AND)
- ☐ b) || (logical OR)
- ☐ c) ! (logical NOT)
- ☐ d) All of the above

No, the answer is incorrect.

Score: 0

Accepted Answers:

*a) && (logical AND)*

**1 point**

Compute the printed value of i of the C program given below

```
#include<stdio.h>
int main()
{
    int i=2;
    i=i++;
    printf("%d", i);
    return 0;
}
```

- ☐ a) 2
- ☐ b) 3
- ☐ c) 4
- ☐ d) Compiler error

Yes, the answer is correct.

Score: 1

Accepted Answers:

*a) 2*

**1 point**

If multiple conditions are used in a single "if" statement then the testing of those conditions are done

- ☐ a) From Right to Left
- ☐ b) From Left to right
- ☐ c) Randomly
- ☐ d) None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

b) From Left to right

1 point

What is the purpose of the given program? n is the input number given by the user.

```
#include <stdio.h>
int main()
{
    int n, x = 0, y;
    printf("Enter an integer: ");
    scanf("%d", &n);
    while (n != 0)
    {
        y = n % 10;
        x = x - y;
        n = n/10;
    }
    printf("Output is = %d", x);
    return 0;
}
```

- ☐ a) Sum of the digits of a number
- ☐ b) The negative sum of the digits of a number
- ☐ c) The reverse of a number
- ☐ d) The same number is printed

Yes, the answer is correct.

Score: 1

Accepted Answers:

b) The negative sum of the digits of a number

1 point

What will be the value of a, b, c after the execution of the followings

```
int a=5, b=7, c=111;
c /= ++a * b--;
```

- ☐ a) a=5, b=6, c=2;
- ☐ b) a=6, b=7, c=1;
- ☐ c) a=6, b=6, c=2;
- ☐ d) a=5, b=7, c=1;

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) a=6, b=6, c=2;

1 point

What will be the output of the following program?

```
#include <stdio.h>
int main()
{
    int x = 1;
    switch (x)
    {
        case 1: printf("Choice is 1 \n");
        default: printf("Choice other than 1 \n");
    }
    return 0;
}
```

- ☐ a) Choice is 1
- ☐ b) Choice other than 1
- ☐ c) Both (a) and (b)
- ☐ d) Syntax error

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) Both (a) and (b)