

Week 6 : Assignment 6

1) What is an array in C?

- a) A collection of similar data elements with the same data type.
- b) A built-in function that performs mathematical calculations.
- c) A keyword used for declaring variables.
- d) A data type used to store characters only.

Yes, the answer is correct.

Score: 1

Accepted Answers:

a) A collection of similar data elements with the same data type.

2) What is the index of the first element in an array?

- a) 0
- b) 1
- c) -1
- d) The index can vary depending on the array size.

Yes, the answer is correct.

Score: 1

Accepted Answers:

a) 0

3) Which loop is commonly used to iterate through all elements of an array in C?

- a) for loop
- b) while loop
- c) do-while loop
- d) switch loop

Yes, the answer is correct.

Score: 1

Accepted Answers:

a) for loop

4) An integer array of 15 elements is declared in a C program. The memory location of the first byte of the array is 2000. What will be the location of the 13th element of the array? Assume int takes 2 bytes of memory.

- a) 2013
- b) 2024
- c) 2026
- d) 2030

Yes, the answer is correct.

Score: 1

Accepted Answers:

b) 2024

5)

How can you find the sum of all elements in a 1D array "arr" with 5 elements using loop in C?

- a) `sum = arr[0] + arr[1] + arr[2] + arr[3] + arr[4];`
- b) `sum = arr[5];`
- c) `for (int i = 0; i <= 5; i++) { sum += arr[i]; }`
- d) `for (int i = 0; i < 5; i++) { sum += arr[i]; }`

Option (a)

Option (b)

Option (c)

Option (d)

Yes, the answer is correct.

Score: 1

Accepted Answers:

Option (d)

6)

What is the output of the following code?

```
#include <stdio.h>
int main()
{
    int arr[] = {1, 2, 3, 4, 5};
    int i = 0;
    while (i < 5) {
        printf("%d ", arr[i]);
        i += 2;}
    return 0;
}
```

- a) 1 3 5
- b) 1 2 3 4 5
- c) 1 2 3
- d) 1 4

Yes, the answer is correct.

Score: 1

Accepted Answers:

a) 1 3 5

7)

What will be the output?

```
#include <stdio.h>
int main()
{
    int arr[]={1,2,3,4,5,6};
    int i,j,k;
    j=++arr[2];
    k=arr[1]++;
    i=arr[j++];
    printf("i=%d, j=%d, k=%d", i, j, k);
    return 0;
}
```

- a) i=5, j=5, k=2
- b) i=6, j=5, k=3
- c) i=6, j=4, k=2
- d) i=5, j=4, k=2

No, the answer is incorrect.

Score: 0

Accepted Answers:

- a) i=5, j=5, k=2

8)

What will be the output after execution of the program?

```
#include <stdio.h>
int main()
{
    int i, a[4]={3,1,2,4}, result;
    result=a[0];
    for(i=1; i<4; i++)
    {
        if(result>a[i])
            continue;
        result=a[i];
    }
    printf("%d", result);
    return 0;
}
```

- a) 1
- b) 2

- c) 3
- d) 4

Yes, the answer is correct.

Score: 1

Accepted Answers:

d) 4

9)

What will be the output?

```
#include<stdio.h>
int main()
{
    int n = 2;
    int sum = 5;
    switch(n)
    {
        case 2: sum = sum-3;
        case 3: sum*=4;
        break;
        default:
            sum =0;

    }
    printf("%d", sum);
    return 0;
}
```

Hint

Yes, the answer is correct.

Score: 1

Accepted Answers:

(Type: Numeric) 8

10)

Find the output of the following C program

```
#include<stdio.h>
int main()
{
    int a;
    int arr[5] = {1, 2, 3, 4, 5};
    arr[1] = ++arr[1];
    a = arr[1]++;
    arr[1] = arr[a++];
    printf("%d, %d", a, arr[1]);
    return 0;
}
```

- a) 5, 4
- b) 5, 5
- c) 4, 4
- d) 3, 4

Yes, the answer is correct.

Score: 1

Accepted Answers:

c) 4, 4