X

Week 6 : Assignment 6

Your last recorded submission was on 2023-09-02, 21:44 Due date: 2023-09-06, 23:59 IST. IST

1) What is an array in C? ***1 point***

- (●) 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.

2) What is the index of the first element in an array? ***1 point***

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

3) Which loop is commonly used to iterate through all elements of an array in C? ***1 point***

- (●) a) for loop
- ( ) b) while loop
- ( ) c) do-while loop
- ( ) d) switch 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. ***1 point***

- ( ) a) 2013

- (●) b) 2024
- ( ) c) 2026
- ( ) d) 2030

5) ***1 point***

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)

6) ***1 point***

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

7) ***1 point***

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 (selected)

8) ***1 point***

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 (selected)
- b) 2
- c) 3
- 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;
}
```

8

Hint

1 point

10)

1 point

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

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers