

# 3 Lecture - CS410

## Important Mcqs

**1. Question: In C, how do you declare an integer array named "numbers" with 5 elements?**

- a) array numbers[5];
- b) int numbers[5];
- c) int[] numbers = {5};
- d) int numbers(5);

**Solution: b) int numbers[5];**

**2. Question: What is the value of the expression "sizeof(numbers)" in C, where "numbers" is an integer array with 10 elements?**

- a) 10
- b) 40
- c) 4
- d) 14

**Solution: b) 40**

**3. Question: In C, how do you access the third element of an array named "data"?**

- a) data(3);
- b) data[3];
- c) data{3};
- d) data.3;

**Solution: b) data[3];**

**4. Question: What is the correct way to pass an array "arr" to a function in C?**

- a) function(arr);
- b) function(arr[]);

c) `function(&arr);`

d) `function(*arr);`

**Solution: b) `function(arr[]);`**

**5. Question: What is a pointer in C?**

a) A variable that stores multiple values

b) A variable that stores the address of another variable

c) An array that points to another array

d) A function that points to another function

**Solution: b) A variable that stores the address of another variable**

**6. Question: What does the "\*" symbol represent when used with a pointer variable in C?**

a) Multiplication

b) Exponentiation

c) Address of a variable

d) Dereferencing the pointer

**Solution: d) Dereferencing the pointer**

**7. Question: How do you declare a pointer variable named "ptr" that points to an integer in C?**

a) `int* ptr;`

b) `ptr* int;`

c) `pointer ptr = int;`

d) `ptr = int*;`

**Solution: a) `int* ptr;`**

**8. Question: What is the value of "ptr" after the following code: `int num = 10; int* ptr = &num;`?**

a) 10

b) The address of "num"

c) The address of "ptr"

d) Garbage value

**Solution: b) The address of "num"**

**9. Question: What happens when you increment a pointer in C using "ptr++"?**

- a) The pointer points to the previous element.
- b) The pointer points to the next element.
- c) The pointer becomes NULL.
- d) The pointer points to the first element.

**Solution: b) The pointer points to the next element.**

**10. Question: How do you dynamically allocate memory for an integer array "arr" of size 5 in C?**

- a) `int arr[5];`
- b) `int arr = (int*)malloc(5);`
- c) `int* arr = new int[5];`
- d) `int* arr = (int*)malloc(5 * sizeof(int));`

**Solution: d) `int* arr = (int*)malloc(5 * sizeof(int));`**