

Q1 What is the difference between a single dimensional array and a multi-dimensional array in C language?

- A) A single dimensional array has only one index, a multi-dimensional array has multiple indices
- B) A multi-dimensional array has only one index, a single dimensional array has multiple indices
- C) Both single dimensional arrays and multi-dimensional arrays have only one index
- D) None of the above

Q2 What is the purpose of the subscript operator ([]) in an array in C language?

- A) To access elements of an array
- B) To store elements in an array
- C) To compare elements of an array
- D) None of the above

Q3 What is the purpose of the pointer arithmetic in C language?

- A) To add or subtract a value from a pointer
- B) To compare two pointers
- C) To calculate the size of a pointer
- D) None of the above

Q4 What is the difference between a string and an array in C language?

- A) A string is a sequence of characters, an array is a collection of variables of the same data type
- B) An array is a sequence of characters, a string is a collection of variables of the same data type
- C) Both strings and arrays are sequences of characters
- D) None of the above

Q5 What is the purpose of the sizeof operator in C language?

- A) To change the size of an array
- B) To find the size of a variable or datatype
- C) To find the size of a saved program
- D) None of the above

Q6 Can you store elements of different data types in a two-dimensional array in C language?

- A) Yes
- B) No
- C) Only Character array can store 'Double' type values
- D) Only Integer array can store a string

Q7 What is the purpose of the sort function in C language when working with arrays?

- A) To sort the elements of an array in ascending or descending order
- B) To access elements of an array
- C) To compare elements of an array
- D) None of the above

Q8 What is a pointer in C language?

- A) A variable that holds the address of another variable
- B) A variable that holds the value of another variable
- C) A variable that holds the name of another variable
- D) None of the above

Q9 What is the purpose of the & operator in C language?

- A) To get the address of a variable
- B) To get the value of a variable
- C) To compare two variables
- D) None of the above

Q10 What is the difference between a pre-decrement and a post-decrement operator in C language?

- A) The pre-decrement operator decrements the value of a variable before using it, the post-decrement operator decrements the value of a variable after using it
- B) The post-decrement operator decrements the value of a variable before using it, the pre-decrement operator decrements the value of a variable after using it
- C) Both pre-decrement and post-decrement operators decrement the value of a variable before using it
- D) None of the above

11. Consider the following code in C:

```
int i = 1;
while (i <= 5)
{ if (i % 2 == 0)
{ break;
}
printf("%d ", i);
i = i + 2; }
```

What is the output of the code?

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

12. Can you have multiple functions with the same name in C programming?

- a) Yes, if the functions have different parameters *(Correct option)
- b) No, functions must have unique names
- c) Yes, if the functions are declared in different files
- d) Yes, if the functions are defined using the inline keyword.

13.What is the difference between a pointer and a normal variable in C?

- a) A normal variable stores the value of a data type, while a pointer stores the memory address of a variable
- b) Pointers are always faster than normal variables
- c) Pointers are always smaller in size than normal variables
- d) Normal variables can only be used inside a function, while pointers can be used globally

14.What will be the output of the following code?

```
int arr[2][2] = {{1, 2}, {3, 4}};  
printf("%d", *(*arr + 1) + *(*arr+1)+1));
```

- a) 3
- b) 4
- c) 2
- d) 6

15.What will be the output of the following code?

```
char name[10] = "Hello";  
char *ptr = name;  
printf("%c", *(ptr+2));
```

- a) 'H'
- b) 'e'
- c) 'l'
- d) "llo"

Q16 What is the purpose of the strcat() function in C language?

- A) To concatenate two strings
- B) To compare two strings
- C) To reverse a string
- D) None of the above

Q17 What is the purpose of the break statement in C language?

- A) To exit a loop
- B) To continue a loop
- C) To transfer control to another part of the program
- D) None of the above

Q18 What is the purpose of the void pointer in C language?

- A) To hold the address of any data type
- B) To hold the value of any data type
- C) To compare two pointers
- D) None of the above

Q19 What is the purpose of the call by reference in C language?

- A) To pass the value of an argument to a function
- B) To pass the address of an argument to a function
- C) To pass a pointer to a function
- D) None of the above

Q20 What is an array in C language?

- A) A collection of variables of the same data type
- B) A collection of variables of different data types
- C) A single variable
- D) None of the above

Q21 What is the purpose of the & operator in C language?

- A) To get the address of a variable
- B) To get the value of a variable
- C) To compare two variables
- D) None of the above

Q22 What is the purpose of the * operator in C language?

- A) To get the value stored at an address
- B) To get the address of a variable
- C) To compare two variables
- D) None of the above

Q23 Can you change the size of an array once it has been declared in C language?

- A) Yes
- B) No
- C) Can be changed while passing to other functions
- D) Cannot be changed only when passing to other functions

Q24 What is the purpose of the for loop in C language when working with arrays?

- A) To access elements of an array
- B) To compare elements of an array
- C) All of the Above
- D) None of the above

Q25 Can you store elements of different data types in an array in C language?

- A) Yes
- B) No
- C) Only Character array can store 'Double' type values
- D) Only Integer array can store a string

26.Can you nest a for loop inside a while loop in C?

- a) Yes
- b) No
- c) Only if the inner loop is a while loop
- d) Only if the inner loop is a for loop

27. What is the purpose of the void keyword in C?

- a) To specify that a function does not return a value
- b) To declare a variable as void
- c) To declare a pointer as void
- d) To specify that a function returns a void value

28. What is the syntax for declaring a pointer in C?

- a) pointer_name;
- b) &pointer_name;
- c) *pointer_name;
- d) pointer_name *;

29.What will be the output of the following code?

```
int arr[2][2] = {{1, 2}, {3, 4}};  
printf("%d", **arr + (*(arr+1)+1));
```

- a) 4
- b) 5
- c) 6
- d) 7

30.What will be the output of the following code?

```
char name[10] = "Hit";  
  
char *ptr = name;  
  
printf("%c", *ptr+3);
```

- a) 'H'
- b) 'e'
- c) 'K'
- d) "llo"