

# C Programming - 70 Important MCQs for BCA 1<sup>st</sup> Semester's Exam.

[@tech.nap](https://tech.nap)

---

1. Who developed the C language?

- A) Dennis Ritchie
- B) James Gosling
- C) Bjarne Stroustrup
- D) Guido van Rossum

Answer: A) Dennis Ritchie

2. C is a \_\_\_\_\_ programming language.

- A) Object-oriented
- B) Procedural
- C) Functional
- D) Logic-based

Answer: B) Procedural

3. Which is a valid C variable name?

- A) 1name
- B) name1
- C) name@123
- D) #name

Answer: B) name1

4. Which symbol is used to terminate a statement in C?

- A) :
- B) .
- C) ;
- D) ,

Answer: C) ;

5. What is the size of an integer in C (in bytes)?

- A) 2
- B) 4
- C) Compiler-dependent

D) 8

Answer: C) Compiler-dependent

6. Which of the following is a loop control structure in C?

A) for

B) while

C) do-while

D) All of the above

Answer: D) All of the above

7. What is the output of if (0)?

A) True

B) False

C) Error

D) None

Answer: B) False

8. Which keyword is used to transfer control to the beginning of a loop?

A) break

B) continue

C) goto

D) return

Answer: B) continue

9. Which loop is guaranteed to execute at least once?

A) for

B) while

C) do-while

D) None of the above

Answer: C) do-while

10. Which of the following is not a jump statement in C?

A) break

B) continue

C) goto

D) switch

Answer: D) switch

11. Which function is used to print output in C?

A) print()

B) printf()

C) cin  
D) cout  
Answer: B) printf()

12. Which of the following is not a valid storage class in C?

A) auto  
B) static  
C) register  
D) mutable  
Answer: D) mutable

13. What is recursion in C?

A) Function calling itself  
B) Function calling main  
C) Function with infinite loops  
D) None of the above  
Answer: A) Function calling itself

14. Which header file is required for printf and scanf?

A) <conio.h>  
B) <stdlib.h>  
C) <stdio.h>  
D) <math.h>  
Answer: C) <stdio.h>

15. What is the return type of the main function in C?

A) int  
B) void  
C) float  
D) None of the above  
Answer: A) int

16. What does a pointer store?

A) Value of variable  
B) Address of variable  
C) Both A and B  
D) None  
Answer: B) Address of variable

17. Which operator is used to access the value at the address of a pointer?

- A) \*
- B) &
- C) ->
- D) None

Answer: A) \*

18. What will be the output of printf("%p", &x);?

- A) Value of x
- B) Address of x
- C) Garbage value
- D) Error

Answer: B) Address of x

19. Which of these is an invalid pointer declaration?

- A) int \*ptr;
- B) float \*ptr;
- C) void ptr;
- D) char \*ptr;

Answer: C) void ptr

20. What does the NULL pointer represent?

- A) Address 0
- B) Garbage address
- C) Undefined
- D) None of the above

Answer: A) Address 0

21. What is the index of the first element in an array?

- A) 0
- B) 1
- C) -1
- D) None

Answer: A) 0

22. Which function is used to concatenate two strings?

- A) strcat()
- B) strcmp()
- C) strlen()
- D) strcpy()

Answer: A) strcat()

23. Which of the following is used to declare a 2D array?

- A) `int arr[10, 10];`
  - B) `int arr[10][10];`
  - C) `int arr(10, 10);`
  - D) `int arr{10, 10};`
- Answer: B) `int arr[10][10];`

24. How is a string stored in C?

- A) Sequence of characters ending with `'\0'`
- B) Sequence of integers
- C) Sequence of floats
- D) None of the above

Answer: A) Sequence of characters ending with `'\0'`

25. Which library is used for string handling?

- A) `<stdio.h>`
- B) `<string.h>`
- C) `<stdlib.h>`
- D) None

Answer: B) `<string.h>`

26. Which function is used to open a file in read mode?

- A) `fopen("file.txt", "r");`
- B) `open("file.txt", "r");`
- C) `file_open("file.txt");`
- D) None

Answer: A) `fopen("file.txt", "r");`

27. What is the return value of `fopen()` if the file cannot be opened?

- A) EOF
- B) NULL
- C) 0
- D) -1

Answer: B) NULL

28. Which function is used to read a character from a file?

- A) `fgetc()`
- B) `fread()`
- C) `getc()`
- D) All of the above

Answer: A) `fgetc()`

29. How do you close a file in C?

- A) close()
- B) fclose()
- C) end()
- D) None

Answer: B) fclose()

30. What does the fprintf() function do?

- A) Writes formatted output to a file
- B) Reads formatted input from a file
- C) Both A and B
- D) None

Answer: A) Writes formatted output to a file

31. Which function is used to open a file in C?

- A) open()
- B) fopen()
- C) fileopen()
- D) None

Answer: B) fopen()

32. What is the file pointer returned by fopen() in C?

- A) NULL
- B) EOF
- C) file pointer
- D) None

Answer: A) NULL

33. Which of the following is correct for string in C?

- A) Strings are enclosed in double quotes
- B) Strings are enclosed in single quotes
- C) Strings are arrays of characters
- D) Both A and C

Answer: D) Both A and C

34. Which of the following statements is true about pointers?

- A) A pointer holds the memory address of a variable
- B) A pointer stores the value of a variable
- C) A pointer does not require dereferencing
- D) None of the above

Answer: A) A pointer holds the memory address of a variable

35. What is the purpose of the `sizeof` operator?

- A) To get the size of a variable in bits
- B) To get the size of a variable in bytes
- C) To get the value of a variable
- D) To get the address of a variable

Answer: B) To get the size of a variable in bytes

36. Which keyword is used to prevent a function from modifying its arguments in C?

- A) const
- B) static
- C) void
- D) None

Answer: A) const

37. What will the following code output?

```
`printf('%d', sizeof(int));`
```

- A) 2
- B) 4
- C) 8
- D) Compiler-dependent

Answer: B) 4

38. Which of the following is a correct syntax for defining a 2D array?

- A) `int arr[10][20];`
- B) `int arr(10, 20);`
- C) `int arr{10, 20};`
- D) None

Answer: A) `int arr[10][20];`

39. What is the value of an uninitialized pointer?

- A) 0
- B) NULL
- C) Garbage
- D) Undefined

Answer: C) Garbage

40. Which function is used to get a string's length?

- A) `strlen()`
- B) `strlength()`
- C) `sizeof()`
- D) `strlen_len()`

Answer: A) `strlen()`

41. Which of the following is not a valid way to access the value of a pointer?

- A) \*ptr
- B) ptr\*
- C) &ptr
- D) All are valid

Answer: C) &ptr

42. What is the default return value of the `main()` function?

- A) 0
- B) 1
- C) void
- D) None

Answer: A) 0

43. What is the purpose of the `break` statement?

- A) Exit a loop
- B) Skip the remaining iteration
- C) Continue the loop
- D) None

Answer: A) Exit a loop

44. Which function is used to write a string to a file?

- A) `fwrite()`
- B) `fprintf()`
- C) `putchar()`
- D) None

Answer: B) `fprintf()`

45. What is the output of the following code snippet?

```
`printf("%d", 5 / 2);`
```

- A) 2
- B) 2.5
- C) 0
- D) 3

Answer: A) 2

46. Which of these cannot be used as a function argument?

- A) Pointer
- B) Array
- C) Function

D) None

Answer: D) None

47. What is the role of the `fscanf()` function?

A) Read a single character from a file

B) Read formatted input from a file

C) Read the entire file

D) None

Answer: B) Read formatted input from a file

48. What is the size of a pointer variable in 64-bit systems?

A) 4 bytes

B) 8 bytes

C) 16 bytes

D) 32 bytes

Answer: B) 8 bytes

49. Which of the following is a valid way to return a value from a function?

A) return value;

B) return address;

C) return pointer;

D) All of the above

Answer: D) All of the above

50. What does the `continue` statement do inside a loop?

A) Terminates the loop

B) Skips the current iteration

C) Exits the program

D) None

Answer: B) Skips the current iteration

51. What is the use of the `void` keyword in C?

A) To declare an empty function

B) To declare a function that returns nothing

C) Both A and B

D) None

Answer: C) Both A and B

52. Which operator is used for bitwise AND in C?

A) &&

B) &

C) |

D) ^

Answer: B) &

53. What is the maximum value of an unsigned char?

A) 127

B) 255

C) 32767

D) 65535

Answer: B) 255

54. Which of the following operators has the highest precedence?

A) +

B) \*

C) ()

D) &&

Answer: C) ()

55. Which format specifier is used to print a float value?

A) %d

B) %f

C) %c

D) %s

Answer: B) %f

56. What does the `break` statement do in a switch-case structure?

A) Ends the entire program

B) Exits the switch block

C) Continues the next iteration

D) None

Answer: B) Exits the switch block

57. Which of the following is a valid declaration of a float variable?

A) int a;

B) float b;

C) double c;

D) char d;

Answer: B) float b;

58. How do you dynamically allocate memory for an array in C?

A) malloc()

B) calloc()

C) realloc()

D) Both A and B

Answer: D) Both A and B

59. What does the `return` statement do?

A) Exits a loop

B) Exits a function

C) Continues to the next iteration

D) None

Answer: B) Exits a function

60. What is the use of the `const` keyword in C?

A) To declare variables that cannot be modified

B) To initialize variables

C) To allocate memory

D) None

Answer: A) To declare variables that cannot be modified

61. Which function is used to allocate memory dynamically?

A) malloc()

B) calloc()

C) realloc()

D) All of the above

Answer: D) All of the above

62. What is a segmentation fault?

A) Accessing memory outside the allocated range

B) Infinite loop

C) Syntax error

D) None

Answer: A) Accessing memory outside the allocated range

63. What is the purpose of `#include` in C?

A) To include standard or user-defined files

B) To define macros

C) To start a comment

D) None

Answer: A) To include standard or user-defined files

64. Which of these is not a standard I/O function?

- A) printf()
  - B) scanf()
  - C) gets()
  - D) putdata()
- Answer: D) putdata()

65. What is the size of the `double` data type in most C compilers?

- A) 4 bytes
- B) 8 bytes
- C) 2 bytes
- D) Compiler-dependent

Answer: B) 8 bytes

66. What does `strcmp()` do in C?

- A) Compares two strings
- B) Copies two strings
- C) Joins two strings
- D) None

Answer: A) Compares two strings

67. Which library function is used to generate random numbers?

- A) rand()
- B) random()
- C) randint()
- D) None

Answer: A) rand()

68. How do you declare a pointer to a function?

- A) `int (*ptr)();`
- B) `int *ptr();`
- C) `int *(*ptr);`
- D) None

Answer: A) `int (*ptr)();`

69. Which is the default storage class in C?

- A) auto
- B) register
- C) extern
- D) static

Answer: A) auto

70. What will the following code output?

```
`printf("%d", sizeof('A'));
```

A) 1

B) 2

C) 4

D) 8

Answer: C) 4

IG @tech.nap