

## 02635 quiz 2

Total Questions: 10

Most Correct Answers: #1

Least Correct Answers: #9

1. Which of the following is a correct declaration of a pointer to an int?

- 0/53 ☐ A int pi = NULL;
- 51/53 ☒ B int \*pi = NULL;
- 1/53 ☐ C int p\*i;
- 1/53 ☐ D int pi\* = NULL;

2. If pi is a pointer to an int and i is an int, which of the following statements makes pi point to i?

- 10/53 ☐ A \*pi = &i;
- 1/53 ☐ B \*pi = \*i;
- 6/53 ☐ C \*pi = i;
- 31/53 ☒ D pi = &i;
- 1/53 ☐ E pi = i;
- 3/53 ☐ F pi = \*i;

3. If pi is a pointer to an int that points to an int i, which of the following statements sets the value of i to 0?

- 9/53 ☐ A pi = 0;
- 35/53 ☒ B \*pi = 0;
- 8/53 ☐ C &pi = 0;

4. The memory allocation routine malloc() returns a pointer. What happens if memory allocation fails?

- 3/53 ☐ A malloc() returns -1
- 2/53 ☐ B malloc() return 0
- 42/53 ☒ C malloc() returns NULL
- 4/53 ☐ D malloc() ends the program

5. Automatically allocated memory must be deallocated with free().

10/53 ☐ A True

41/53 ☒ B False

6. A two-dimensional array is an array of arrays.

50/53 ☒ A True

1/53 ☐ B False

7. A pointer to a two-dimensional array of doubles has type (double \*).

11/53 ☐ A True

40/53 ☒ B False

8. Suppose that S is a variable of type "struct my\_struct" with two members a and b of type int. How do you access a and b?

8/53 ☐ A Using the "->" operator, i.e., S->a and S->b

41/53 ☒ B Using the "." operator, i.e., S.a and S.b

1/53 ☐ C Using the "\_" operator, i.e., S\_a and S\_b

1/53 ☐ D a and b are private variables and hence not accessible

9. Suppose ptrS is a pointer to a struct with two members a and b. Which of the following expressions can be used to access the members a and b using ptrS?

17/53 ☒ A (\*ptrS).a and (\*ptrS).b

1/53 ☐ B (&ptrS).a and (&ptrS).b

41/53 ☒ C ptrS->a and ptrS->b

0/53 ☐ D &ptrS->a and &ptrS->b

6/53 ☐ E \*ptrS.a and \*ptrS.b

10. Two structs be compared for equality. In other words, the operation A==B is defined if A and B are structs of the same type.

21/53 ☐ A True

29/53 ☒ B False