

DB:

1- D

2- B

3- B?

4- B

5- D

6- D

7- B

8- B

9- C ou/et D -> The UNION operator is used to combine the result-set of two or more SELECT statements.

10- C

11- C

12- B

13- E? -> CREATE DATABASE IF NOT EXISTS [database_name];

14- A

15- A

16- C

17- B

18- A/C

19- D

20- A?

CONCEPTION AND OOP :

1- D

2- B

3- B

4- B -> Class attributes are attributes which are owned by the class itself. They will be shared by all the instances of the class. Therefore, they have the same value for every instance. We define class attributes outside all the methods, usually they are placed at the top, right below the class header.

5- A/B -> If the diamond is left empty, it signifies it is an aggregation. If the diamond is black, this means it is a composition.

6- C

7- B

8- C

9- B/D/E

10- B

11- B

12- C

13- A/C/D

14- B

15- C

16- B

17- C

18- A

19- E

20- B

ALGO :

1- B

2- A

3- B

4- D

5- B

6- D

7- B

8- C

9- B

10- D -> elements have always the same type.

E -> In an array, elements are stored at contiguous positions in memory, allowing direct access to any element in constant time ($O(1)$) using its index.

C? -> An array can contain elements of different data types, depending on the programming language used.

DATA STRUCTURES:

1- A/C -> Inorder traversal: In-order traversal of a binary search tree produces a sorted list of elements.

Preorder traversal: Preordering a binary search tree can produce an unsorted list of elements.

Postorder traversal: Postfix traversal of a binary search tree can also produce an unsorted list of elements.

2- A -> The time complexity of the Euclidean algorithm is logarithmic, and the number of recursive calls is approximately $O(\log(\min(n, m)))$. In other words, the number of recursive calls will be proportional to the logarithm of the smaller of the two numbers n and m .

3- B -> queue is FIRST IN FIRST OUT

4- D

5- B

6- B

7- C

8- E

9- B

10- A