DAY-19(2D ARRAY)

1

When you create an array using the following statement, the element values are automatically initialized to 0.
int arr[][] = new int[5][5];

☑ True

☐ False

Correct

Which of the following create an empty two-dimensional array with dimensions 2×2?

- ☐ int[][] blue = new int[2 x 2];

- ☑ int[][] blue = new int[2][2];

- ☐ int[][] blue = new int[2, 2];

- ☐ int[][] blue = new int[2], [2];

Correct

Predict the output –

```java
public class TwoDArraySum {
    public static void main(String[] args) {
        int[][] arr = {
            {1, 2, 3},
            {4, 5, 6},
            {7, 8, 9}
        };

        int sum = 0;

        for (int i = 0; i < arr.length; i++) {
            for (int j = 0; j < arr[i].length; j++) {
                sum += arr[i][j];
            }
        }

        System.out.println("Sum of elements in the 2D array: " + sum);

    }
}
```

☐ 12

☐ 40

☐ 45

☐ 15

Incorrect

What are the contents of arr after the following code has been executed?

```
int[][] arr = { {3,2,1},{1,2,3}};
int value = 0;
for (int row = 1; row < arr.length; row++) {
    for (int col = 1; col < arr[0].length; col++) {
        if (arr[row][col] % 2 == 1){
            arr[row][col] = arr[row][col] + 1;
        }
        if (arr[row][col] % 2 == 0){
            arr[row][col] = arr[row][col] * 2;
        }
    }
}
```

☐ { {6, 4, 2}, {2, 4, 6}}

☐ { {3, 2, 1}, {1, 4, 4}}

☐ { {3, 2, 1}, {1, 4, 8}}

☐ { {3, 2, 1}, {1, 4, 6}}

Incorrect

What are the contents of arr after the following code has been executed?

```
int[][] arr = { {3,2,1},{1,2,3}};
int value = 0;
for (int row = 1; row < arr.length; row++) {
    for (int col = 1; col < arr[0].length; col++) {
        if (arr[row][col] % 2 == 1){
            arr[row][col] = arr[row][col] + 1;
        }
        else if (arr[row][col] % 2 == 0){
            arr[row][col] = arr[row][col] * 2;
        }
    }
}
```

☐ { {3, 2, 1}, {1, 4, 4}}

☐ { {4, 4, 2}, {2, 4, 4}}

☐ { {3, 2, 1}, {1, 4, 6}}

☐ { {6, 4, 2}, {2, 4, 6}}

Incorrect