**Choose the answers from below questions**

**1.What will the following code output? [c]**

let x = 5;

while (x < 3) {

    console.log(x);

    x++;

}

a) 5  
b) 3  
c) No output  
d) 5, 6, 7... (Infinite loop)

**2. What will be the result of the following code? [b]**

let y = 0;

do {

    console.log(y);

    y++;

} while (y < 2);

a) 0  
b) 0, 1  
c) 1, 2  
d) No output

**3. Which statement is true about the difference between while and do...while loops? [b]**

a) while loops execute at least once, while do...while loops may not execute at all.  
b) do...while loops execute at least once, while while loops may not execute at all.  
c) Both while and do...while loops execute at least once.  
d) Neither loop guarantees execution of the code block.

**4. What will the following code print? [a]**

let count = 5;

do {

    console.log(count);

    count--;

} while (count > 0);

a) 5, 4, 3, 2, 1  
b) 5  
c) 4, 3, 2, 1  
d) No output

**5. Which of the following loops will execute the code block at least once, even if the condition is initially false? [b]**

a) while loop  
b) do...while loop  
c) for loop  
d) for...in loop

**6. What will be the output of the following code? [b]**

let z = 0;

while (z < 3) {

    console.log(z);

    z++;

}

a) 1, 2, 3  
b) 0, 1, 2  
c) 0, 1, 2, 3  
d) No output

**7. What is the primary difference between the while loop and the do...while loop? [a]**

a) The while loop checks the condition before the code block runs, while the do...while loop checks the condition after.  
b) The do...while loop runs only once, while the while loop runs indefinitely.  
c) The while loop checks the condition after the code block runs, while the do...while loop checks it before.  
d) There is no difference between the two loops.

**8. What will be the output of this code? [b]**

let i = 0;

while (i < 5) {

    console.log(i);

    if (i === 3) break;

    i++;

}

a) 0, 1, 2, 3, 4  
b) 0, 1, 2, 3  
c) 0, 1, 2  
d) Infinite loop

**9. Which of the following is the correct usage of a do...while loop? [c]**

a) while (condition) { do { // code } }  
b) do { // code } while (condition);  
c) do while (condition) { // code }  
d) while (condition) do { // code };

**10. What will be the output of the following code? [a]**

let a = 0;

do {

    console.log(a);

    a++;

} while (a < 0);

a) 0  
b) 1  
c) No output  
d) Infinite loop

**Write a code to below questions**

1. Write a while and do while loop that prints the numbers from 1 to 5 in the console.

let n=1

while(n<=5)

{

    console.log(n)

    n++

}

Output:

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

1

2

3

4

5

let n=1

do{

    console.log(n)

    n++

}

while(n<=5);

output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

1

2

3

4

5

1. How would you exit a while loop if a specific condition is met (e.g., when the number equals 3), Write a example code?

while (n <= 5) {

    console.log(n);

    if (n === 3) {

        break;

    }

    n++;

}

Output: -

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

1

2

3

1. Write a while and do while loop that prints numbers from 1 to 10, but skips printing the any number from 1 to 10 .

let n = 1;

do {

    if (n === 8) {

        n++;

        continue;

    }

    console.log(n);

    n++;

} while (n <= 10);

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

1

2

3

4

5

6

7

9

10

let n = 1;

while(n<=10){

    if(n===8){

        n++

        continue

    }

    console.log(n)

    n++

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

1

2

3

4

5

6

7

9

10

4. Write a while loop that prints all even numbers from 0 to 20

let n=1

while(n<=20){

    if(n%2==0){

        console.log(n)

        }n++

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

2

4

6

8

10

12

14

16

18

20

.

**Write a code for below questions using Conditional Statements**

1.Write an if statement in JavaScript that checks if a number is greater than 10, and prints "Number is greater than 10" if true.

let n=17

if(n>10){

    console.log(`${n} is greatern than 10`)

}

if(n<10)

{

    console.log(`not greatern than 10`)

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

17 is greatern than 10

1. Write an if-else statement that checks if a number is even or odd, and prints "Even" if it's even, or "Odd" if it's odd.

let n=37 // 56

if(n%2==0){

    console.log(`${n} is even number`)

}

else{

    console.log(`${n} is odd number`)

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

56 is even number

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

37 is odd number

1. Write an if-else if-else ladder that checks the value of a variable grade and prints:

* "A" for grades 90 and above,
* "B" for grades 80 to 89,
* "C" for grades 70 to 79,
* "F" for grades below 70.
* let marks=100
* if(marks==90 && marks>90){
* console.log(`a`)
* }
* else if(marks==80 && marks<=89){
* console.log(`b`)
* }
* else if(marks==70 && marks<=79){
* console.log(`c`)
* }
* else
* {
* console.log(`f`)
* }

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

f

1. Write a nested if statement that checks if a number is positive and, if true, checks if it's even or odd.

let n =67//78

if(n>0)

{

    console.log(`${n} positive`)

    if(n%2==0)

{

        console.log(`${n} is even`)

    }

    if(n%2!=0)

{

        console.log(`${n} is odd`)

    }

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

78 positive

78 is even

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

67 positive

67 is odd

1. Rewrite the following code using if else statement :

                let age = 20;

                 console.log(age >= 18 ? "Adult" : "Minor");

let age=20;//1

let age1="adult"

let age2="minor"

if(age>=18){

    console.log(`you ${age1} age is ${age} you eligible to cast the vote`)

}

else{

    console.log(`you ${age2} age is ${age} you not-eligible to cast the vote`)

}

Output:- PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

you adult age is 20 you eligible to cast the vote

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

you minor age is 15 you not-eligible to cast the vote

1. Write an if statement that checks if a number is between 10 and 20 (inclusive). Print "In range" if true, otherwise print "Out of range".

let n =20

if(n<=20){

    for(i=10;i<n;i++)

    console.log(`${i} in range`)

}

else{

  console.log("out of the range")

}

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

10 in range

11 in range

12 in range

13 in range

14 in range

15 in range

16 in range

17 in range

18 in range

19 in range

1. What is the difference between == and === in an if statement in JavaScript? Provide an example where each would behave differently.

let a="3"

let b=3

console.log(a==b)

console.log(a===b)

output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

true

false

1. Write an if statement that checks if a number is between 10 and 20 or if it's exactly 30, and prints "Condition met" if true.
2. let number = 15;
3. if((number>10 && number<20) || number===30)
4. {
5. console.log("Condition met");
6. }

Output:-

PS F:\10k\_coders\27r\_Java\_Script\_10k\_Coders\Java\_script\_Assignment\Day\_08\_all\_questions> node index.js

Condition met