

1.what will be the output of the code?

```
console.log(x);  
Var x = 5;
```

Ans: undefined, because the interpreter will allocate memory for variable before execution in the global execution container.

Due to the reason initialization of the x is done after the console operation the output is undefined.

2.what will be the output of the code?

```
console.log(a);  
Var a;
```

Ans: undefined, the reason for this is the same as the above mentioned,the declaration of the variable is done after the console operator.

3.what will be the output of the code?

```
console.log(b);  
b=10;  
var b;
```

Ans: undefined

4.what will be the output of the code?

```
console.log(c);
```

Ans: ReferenceError: c is not defined, when interpreter is searching for the declaration of the c if in case it is not able to find it then it will give reference error when we try to console it.

5.what is the output of the code ?

```
console.log(e);  
var e=10;  
console.log(e);  
e=20;
```

```
console.log(e);
```

Ans: undefined,10,20; in the first case the console operation is performed before the initialization process, due to the interpreter being the line-by-line execution.

In the second case console operation is performed after the initialization process so when we try to print the output it is going to display the initialised value.

In the last case we are assigning a new value to the variable so the variable value will be updated with the last value.

6.what will be the output of the code?

```
console.log(f);  
Var f = 100;  
Var f;  
console.log(f);
```

Ans: undefined in the first case,as mentioned in the above reason

100,In the second case first initialisation of the variable took place then declaration of the variable so the initialisation value will be printed when we perform console operation.

7.what will be the output of the code ?

```
console.log(g);  
Var g = g + 1;  
console.log(g);
```

Ans: undefined in the first case

NaN(Not a number) in the second case as we are trying to add a string with a number it is displaying output as a NaN

8.what is the output of the code?

```
var h;  
console.log(h);  
h=50;  
console.log(h);
```

Ans: undefined in the first case

In the second case as we are declaring the h and assigning it next after the console operation if we perform console operation assigning then the assigned value will be printed by using console operation.

9.what will be the output of the code?

```
console.log(i);  
i = 10;  
Var i = 5;  
console.log(i);
```

Ans: undefined in the first case

In the second case first assigning of the value is done then initialisation of the value took place because the last assigned value is going to print when we perform console operation.