

Task#1: Closures :-

Closure happens when you create one function or more (Inner Function) inside a function (Outer Function) and it allows you to access the outer scope from the inner function even after the outer function is executed.

Example :-

```
function out(num1) {  
  return function inn(num2) {  
    return num1 + num2;  
  }  
}  
  
let closure = out(5);  
  
let res = closure(3);  
  
console.log(res);  
  
console.dir(closure);
```

Task#3: Hoisting :-

Hoisting is a process that moves the declaration of all Variables (**only var variables**), Functions and Classes to the top of their scope. This means that you can initialize the value of a variable and call it or use it in your process before even declaring it. You can also reference a variable in its scope before declaring it and it will not appear a reference error but the value will be undefined.

Example :-

Hoisted Variable :-

```
x = 5;  
console.log(x); // 5  
var x;
```

Hoisted Reference :-

```
console.log(x); // undefined  
var x = 5;
```

Hoisted Function :-

```
hoisted(); // "Hello World!"  
  
function hoisted() {  
    console.log("Hello World!");  
}
```

