






## Assignment (Session\_2)

Important Points to remember before attempting this assignment:

<pre>var x = 10; var x = 20;</pre> 	<pre>let x = 10; let x = 20;</pre> <p>SyntaxError: Identifier 'x' has already been declared</p>	<pre>const x = 10; const x = 20;</pre> <p>SyntaxError: Identifier 'x' has already been declared</p>
<pre>var y; y = 10;</pre> 	<pre>let y; y = 10;</pre> 	<pre>const y; y = 10</pre> <p>SyntaxError: Missing initializer in const declaration</p>
<pre>var z = 20; z = "amit"</pre> 	<pre>let z = 20; z = "amit"</pre> 	<pre>const z = 20; z = "amit"</pre> <p>TypeError: Assignment to constant variable.</p>
<pre>console.log(a); var a = 10;</pre> <p>Undefined</p> <p>The var statement declares a function-scoped or globally-scoped variable.</p>	<pre>console.log(a); let a = 10;</pre> <p>ReferenceError: Cannot access 'a' before initialization</p> <p>The let declaration declares a block-scoped local variable</p>	<pre>console.log(a); const a = 10;</pre> <p>ReferenceError: Cannot access 'a' before initialization</p> <p>The const declaration creates block-scoped constants, much like variables declared using the let keyword. The value of a constant can't be changed through reassignment (i.e. by using the assignment operator), and it can't be redeclared (i.e. through a variable declaration). However, if a constant is an object or array its properties or items can be updated or removed.</p>

Write the output of the following programs?

1>

```
let y = 30;

function bar() {
  console.log(y);
  let y = 40;
}

bar();
```

2>

```
const z = 50;

z = 60;
console.log(z);
```

3>

```
var x = 10;

function foo() {
  if (true) {
    var x = 20;
    let y = 30;
    console.log(x, y);
  }

  console.log(x);
}

foo();
```

4>

```
var x = 10;

function bar() {
  console.log(x);
  let x = 20;
}

bar();
```

5>

```
function baz() {  
  console.log(x);  
  var x = 30;  
  let x = 40;  
}  
  
baz();
```

6>

```
function qux() {  
  console.log(x);  
  if (true) {  
    let x = 50;  
  }  
}  
  
qux();
```

7>

```
let z = 50;  
  
{  
  const z = 60;  
  console.log(z);  
}  
  
console.log(z);
```

8>

```
const person = {  
  name: "John",  
  age: 30  
};  
  
person.age = 40;  
console.log(person.age);
```