

// Function Generator Example1

```
function* display() {  
  console.log("CVR college");  
  console.log("CSE Department");  
  console.log("III Year CSE");  
}  
  
const obj = display();  
console.log(obj);  
console.log(obj.next());
```

// Function Generator Example2

```
function* display() {  
  console.log("CVR college");  
  yield;  
  console.log("CSE Department");  
  yield;  
  console.log("III Year CSE");  
}  
  
const obj = display();  
console.log(obj.next());  
console.log(obj.next());  
console.log(obj.next());
```

// Function Generator Example3

```
function* generatorfunc() {  
  yield 1;  
  yield 2;  
  yield 3;  
}  
  
const genfun = generatorfunc();  
console.log(genfun);
```

```
console.log(genfun.next());  
console.log(genfun.next());  
console.log(genfun.next());  
console.log(genfun.next());
```

```
// Function Generator Example4
```

```
function* simpleGenerator() {  
  console.log("Before 1");  
  yield 1;  
  console.log("After 1");  
  console.log("Before 2");  
  yield 2;  
  console.log("After 2");  
  console.log("Before 3");  
  yield 3;  
  console.log("After 3");  
  console.log("Exit");  
}  
  
let genObj = simpleGenerator();  
console.log(genObj.next());  
console.log(genObj.next());  
console.log(genObj.next());  
console.log(genObj.next());
```

```
// Use cases
```

```
// 1. Multiple generators
```

```
function* simpleGenerator() {  
  yield 1;  
  yield 2;  
  yield 3;  
}
```

```
let genObj1 = simpleGenerator();
let genObj2 = simpleGenerator();
console.log(genObj1.next());
console.log(genObj1.next());
console.log(genObj2.next());
console.log(genObj2.next());
console.log(genObj1.next());
console.log(genObj2.next());
console.log(genObj1.next());
console.log(genObj2.next());
```

// 2. Infinite loop

```
function* genId() {
  let id = 1;
  while (true) {
    yield id;
    id++;
  }
}

const funGen = genId();
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
console.log(funGen.next());
const funGen2 = genId();
console.log(funGen2.next());
```

// 3. Iterating the elements of an array

```
function* generatorfn(array) {  
  for (let i = 0; i < array.length; i++) {  
    yield array[i];  
  }  
}  
  
const genobj = generatorfn([1, 3, 5, 7, 9]);  
console.log(genobj.next());  
console.log(genobj.next());  
console.log(genobj.next());  
console.log(genobj.next());  
console.log(genobj.next());  
console.log(genobj.next());
```

// 4. return can be used to exit out of the generator.

```
function* display() {  
  yield 10;  
  yield "How are you";  
  return 20;  
}  
  
const obj = display();  
console.log(obj.next());  
console.log(obj.next());  
console.log(obj.next());  
console.log(obj.next());
```

// 5. using for..of loop

```
function* genfun() {  
  yield 1;  
  yield 2;  
  yield 3;
```

```
yield 4;  
yield 5;  
return 6;  
}
```

```
for (a of genfun()) {  
  console.log(a);  
}
```