

Function

1) Function ✓

```
function findSum(x, y) {  
  let z = x + y;  
  return(z);  
}
```

11

```
let findSum = function(x, y) {  
  let z = x + y;  
  return(z);  
}  
  
let sum = findSum;  
findSum(10, 20);  
sum(10, 20);
```

3) Arrow function

```
let findSum = (x, y) => {  
  let z = x + y;  
  return(z);  
}
```



}



```
let findSum2 = (x, y) => x + y ;
```



```
function display(sm) {  
  console.log("sum:" + sm);  
}
```

```
function add(x, y) {  
  let z = x + y;  
  return(z);  
}
```

```
function main()  
{  
  let a, b, c;  
  a = 100;  
  b = 200;
```

main()

```
function displayGui(sm) {  
  console.log("GUI? sum:" + sm);  
}
```

```
add(a, b, displayGui);  
add(a, b, display);
```

```
function simpleInterest(p, t, r) {
  let i = p * t * r / 100;
  return(i);
}
```

```
function compoundInterest(p, t, r) {
  let i = p * (1 + r / 100) ** t;
  return(i);
}
```

```
function calcInterest(p, t, r, interest) {
  let i;
  i = interest(p, t, r);
  return(i);
}
```

```
function main() {
  let p = 10000;
  let t = 2;
  let r = 14.5;
  let i = calcInterest(p, t, r, simpleInterest);
  let c = calcInterest(p, t, r, compoundInterest);
  console.log(i);
  console.log(c);
}
main();
```

```
function calcInterest(p, t, r, interest) {
  let i;
  i = interest(p, t, r);
  return(i);
}
```

```
function main() {
  let p = 10000;
  let t = 2;
  let r = 14.5;
  let i = calcInterest(p, t, r, function(p, t, r) {
    let i = p * t * r / 100;
    return(i);
  });
```

```
console.log("SI:", i);
```

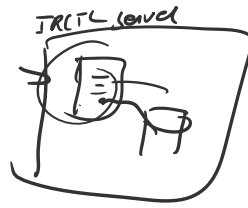
```
let i = calcInterest(p, t, r, function(p, t, r) {
  let i = p * (1 + r / 100) ** t;
  return(i);
});
```

```
console.log("CI:" + i);
```

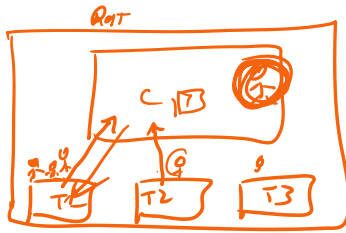
```
}
```



2 min



Async



```
function findSum(x, y, display) {
  let z = x + y;
  display(z);
}
```

```
function main() {
```

```
  let a = 25;
```

```
  let b = 35;
```

```
  findSum(a, b, function(result) {
```

```
    console.log("Sum: " + result);
```

```
  });
```

```
}
```

```
main()
```

```

function getUsaid() {
  return (1001);
}

function getUn(vid) {
  let s = {vid: vid, un: "CS1001"};
  return(s);
}

function getStudent(s) {
  s["name"] = "Rakesh";
  s["pa"] = 65.55;
  return(s);
}

function main() {
  let id = getUsaid();
  let idun = getUn(id);
  let s = getStudent(idun);
  console.log(s);
}

main();

```

```

function getUsaid(callback) {
  callback(1001);
}

function getUn(vid, callback) {
  let s = {vid: vid, un: "CS1001"};
  callback(s);
}

function getStudent(s, callback) {
  s["name"] = "Rakesh";
  s["pa"] = 65.55;
  callback(s);
}

```

Callback Hell

```

function main() {
  getUsaid(function(vid) {

```

getUn(vid, function(idun) {

getStudent(idun, function(stud) {
console.log(stud);

});

});

});
main();