

**1. Create a function that takes a number as it's only argument and returns true if it is less than or equal to 0, otherwise return false.**

main.js

Run

Share

```
1 let num = parseInt(prompt("Enter a number : "));
2 function checkNumber (num){
3     if(num <= 0 ){
4         document.write(true) ;
5     }else{
6         document.write(false)
7     }
8 }
9 checkNumber(num);
```

Output

Clear

node /tmp/TZdrUwaviX.js  
Enter a number : 0  
true

main.js

Share

Run

Output

Clear

```
1 let num = parseInt(prompt("Enter a number : "));
2 function checkNumber (num){
3     if(num <= 0 ){
4         document.write(true) ;
5     }else{
6         document.write(false)
7     }
8 }
9 checkNumber(num);
```

node /tmp/0Fzf888mnz.js  
Enter a number : 10  
false

## 2. Write a JavaScript program to find the area of a triangle.

main.js

Share

Run

Output

Clear

```
1 let b = parseInt(prompt("Enter base of the triangle : "));
2 let h = parseInt(prompt("Enter height of the triangle : "));
3 let area = (1/2) * b * h;
4 document.write("Area of triangle is : "+area);
```

```
node /tmp/f4innptwjl.js
Enter base of the triangle : 10
Enter height of the triangle : 20
Area of triangle is : 100
```

### 3. Write a JavaScript program to determine whether a given year is a leap year.

```
main.js  [Icons]  Run  Output  Clear

1 let year = prompt("Enter a Year to check : ");
2 function checkLeapYear(year){
3     if(year % 4 == 0 ){
4         document.write("It is leap year");
5     }else if (year % 100 == 0 && year % 400 != 0){
6         document.write("It is leap year");
7     }else if (year % 400 == 0 ){
8         document.write("It is Leap year");
9     }else{
10        document.write("It is not a leap Year");
11    }
12 }
13 checkLeapYear(year);
```

```
node /tmp/ljKzbEUB1w.js
Enter a Year to check : 2000
It is leap year
```

```
main.js  [Icons]  Run  Output  Clear

1 let year = prompt("Enter a Year to check : ");
2 function checkLeapYear(year){
3     if(year % 4 == 0 ){
4         document.write("It is leap year");
5     }else if (year % 100 == 0 && year % 400 != 0){
6         document.write("It is leap year");
7     }else if (year % 400 == 0 ){
8         document.write("It is Leap year");
9     }else{
10        document.write("It is not a leap Year");
11    }
12 }
13 checkLeapYear(year);
```

```
node /tmp/tvjxY5K9YB.js
Enter a Year to check : 2001
It is not a leap Year
```

### 4. Write a JavaScript program to convert temperatures to and from Celsius, Fahrenheit.

```
main.js  [Icons]  Run  Output  Clear

1
2 function celsiusToFahrenheit ( ){
3     let f = parseInt(prompt("Enter a Fahrenheit to convert into celsius : "))
4     let c = 5/9 * (f - 32);
5     document.write("Converted Fahrenheit into celsius : "+c);
6 }
7
8 celsiusToFahrenheit();
9
10
11 function FahrenheitToCelsius ( ){
12     let c = parseInt(prompt("Enter a Celsius to convert into Fahrenheit : "))
13     let f = (9/5 * c) + 32;
14     document.write("Converted Celsius into Fahrenheit : "+f);
15 }
16 FahrenheitToCelsius();
```

```
node /tmp/FLBccwYEG0.js
Enter a Fahrenheit to convert into celsius : 20
Converted Fahrenheit into celsius : -6.666666666666667
Enter a Celsius to convert into Fahrenheit : 20
Converted Celsius into Fahrenheit : 68
```

**5. Write a JavaScript function that returns array elements larger than a number.**

```
main.js  [ ] [ ] [ ] Share Run Output Clear
1-      function checkArrayNumber() {
2-          let arr = [12, 30, 20];
3-          let num = 15;
4-          for (let i = 0; i < arr.length; i++) {
5-              if (num < arr[i]) {
6-                  document.write(" " , " , arr[i]);
7-              }
8-          }
9-      }
10-      checkArrayNumber()
```

```
node /tmp/mb20ACX1w1.js
, 30
, 20
```

**6. Write a JavaScript conditional statement to sort three numbers.  
Display an alert box to show the result.**

```
main.js  [ ] [ ] [ ] Share Run Output Clear
1-      let n1 = parseInt(prompt("Enter first number : "));
2-      let n2 = parseInt(prompt("Enter second number : "));
3-      let n3 = parseInt(prompt("Enter third number : "));
4-      if (n1 > n2 && n1 > n3) {
5-          if (n2 > n3) {
6-              document.write(n1, " , ", n2, " , ", n3);
7-          } else {
8-              document.write(n1, " , ", n3, " , ", n2);
9-          }
10-      } else if (n2 > n1 && n2 > n3) {
11-          if (n1 > n3) {
12-              document.write(n2, " , ", n1, " , ", n3);
13-          } else {
14-              document.write(n2, " , ", n3, " , ", n1);
15-          }
16-      } else if (n3 > n2 && n3 > n1) {
17-          if (n1 > n2) {
18-              document.write(n3, " , ", n1, " , ", n2);
19-          } else {
20-              document.write(n3, " , ", n2, " , ", n1);
21-          }
22-      }
```

```
node /tmp/q31Unl0wv.js
Enter first number : 10
Enter second number : 20
Enter third number : 30
30 , 20 , 10
```

7. Write a JavaScript program which compute, the average marks of the following students Then, this average is used to determine the corresponding grade. The grades are computed as follows :

Range	Grade
<60	F
<70	D
<80	C
<90	B
<100	A

```
main.js  Run  Output  Clear
1  let students = [['Deepak', 80], ['Shubham', 77], ['Priyanshu', 88],
2    ['Aayush', 95], ['Aditya', 68]];
3
4  let Avgmarks = 0;
5  for (let i = 0; i < students.length; i++) {
6    Avgmarks += students[i][1];
7    var avg = (Avgmarks / students.length);
8  }
9
10 console.log("Average grade: " + (Avgmarks) / students.length);
11
12 if (avg < 60) {
13   console.log("Grade: F");
14 } else if (avg < 70) {
15   console.log("Grade: D");
16 } else if (avg < 80) {
17   console.log("Grade: C");
18 } else if (avg < 90) {
19   console.log("Grade: B");
20 } else if (avg <= 100) {
21   console.log("Grade: A");
22 }
23
```

node: /tmp/vfYhUJG140.js  
Average grade: 81.6  
Grade: B