

Comparators and Equality

`===` Is equal to
`!==` Is not equal to
`>` Is greater than
`<` Is lesser than
`>=` Is greater or equal to
`<=` Is lesser or equal to

`&&` AND
`||` OR
`!` NOT

Difference between two equal signs == and three equal signs ===

Two equal signs == check equality only while **three equal signs ===** check equality as well as data types.

```
> var a=1;
var b="1";
typeof(a);
typeof(b);
if(a===b){
  console.log("Yes");
}
else{
  console.log("No");
}
```

No

< undefined

```
> var a=1;
var b="1";
typeof(a);
typeof(b);
if(a==b){
  console.log("Yes");
}
else{
  console.log("No");
}
Yes
< undefined
> typeof(a);
< 'number'
> typeof(b);
< 'string'
>
```

```
prompt("What is your name?");
```

```
prompt("What is their name?");
```

```
var loveScore = Math.random()*100;
```

```
loveScore = Math.floor(loveScore)+1; //1-100
```

```
if(loveScore===100){
```

```
  alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");
```

```
}
```

```
if(loveScore>70){
```

```
  alert("Your love score is: "+loveScore+"%. You are lucky");
```

```
}
```

```
else{
```

```
  alert("Your love score is: "+loveScore+"%");
```

```
}
```

```
> prompt("What is your name?");
prompt("What is their name?");

var loveScore = Math.random()*100;
loveScore = Math.floor(loveScore)+1; //1-100
if(loveScore===100){
  alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");
}
if(loveScore>70){
  alert("Your love score is: "+loveScore+"%. You are lucky");
}
else{
  alert("Your love score is: "+loveScore+"%");
}
< undefined
> |
```

```
prompt("What is your name?");
```

```
prompt("What is their name?");
```

```
var loveScore = Math.random()*100;
```

```
loveScore = Math.floor(loveScore)+1; //1-100
```

```
if(loveScore===100){
```

```
  alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");
```

```
}
```

```
if(loveScore>70){
```

```
  alert("Your love score is: "+loveScore+"%. You are lucky");
```

```
}
```

```
else{
```

```
  alert("Your love score is: "+loveScore+"%");
```

```
}
```




```

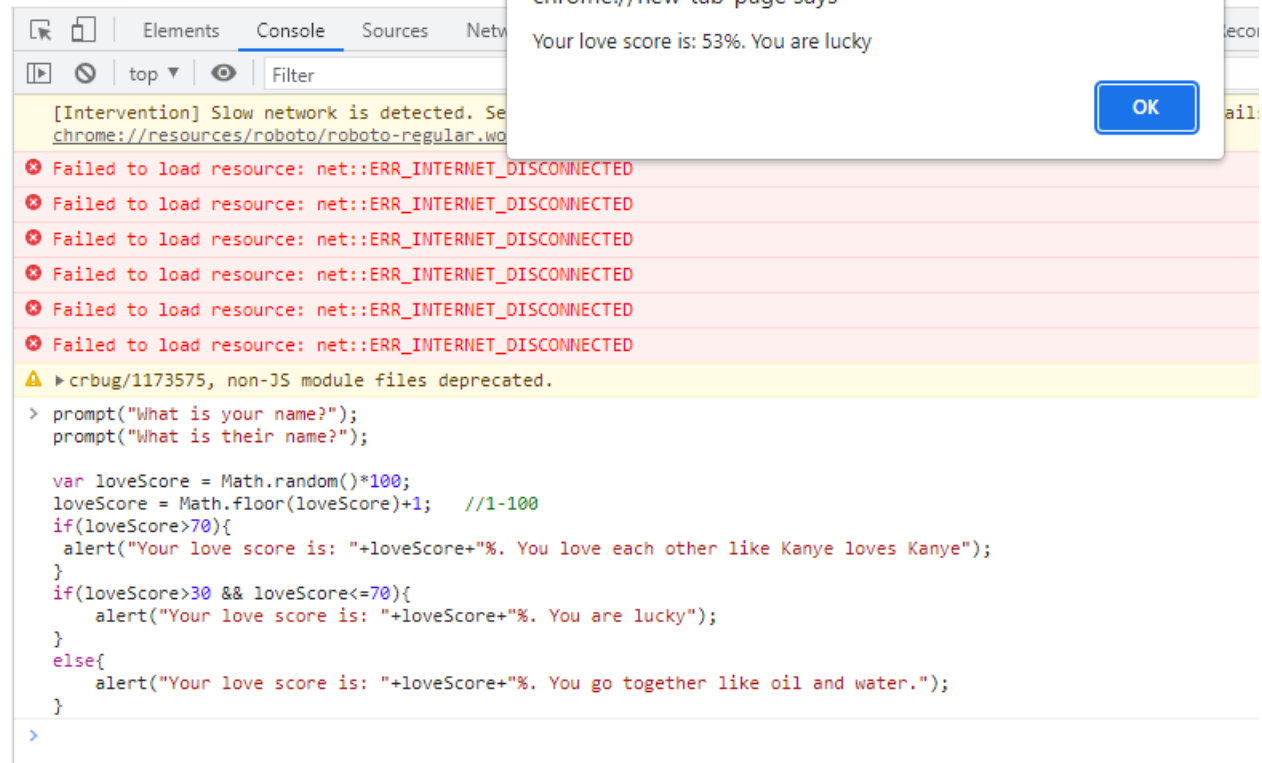
> prompt("What is your name?");
prompt("What is their name?");

var loveScore = Math.random()*100;
loveScore = Math.floor(loveScore)+1; //1-100
if(loveScore==100){
  alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");
}
if(loveScore>70){
  alert("Your love score is: "+loveScore+"%. You are lucky");
}
else{
  alert("Your love score is: "+loveScore+"%");
}
< undefined
>

```

earch Google or type a URL

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The screenshot shows a web browser window with a console open. The console displays several error messages: "[Intervention] Slow network is detected. See chrome://resources/roboto/roboto-regular.wo", "Failed to load resource: net::ERR_INTERNET_DISCONNECTED" (repeated six times), and "crbug/1173575, non-JS module files deprecated.". An alert dialog is displayed over the console, showing the text "chrome://new-tab-page says" and "Your love score is: 53%. You are lucky". The dialog has an "OK" button. The console also shows the following JavaScript code:

```

> prompt("What is your name?");
prompt("What is their name?");

var loveScore = Math.random()*100;
loveScore = Math.floor(loveScore)+1; //1-100
if(loveScore>70){
  alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");
}
if(loveScore>30 && loveScore<=70){
  alert("Your love score is: "+loveScore+"%. You are lucky");
}
else{
  alert("Your love score is: "+loveScore+"%. You go together like oil and water.");
}
>

```

prompt("What is your name?");

prompt("What is their name?");

var loveScore = Math.random()*100;

loveScore = Math.floor(loveScore)+1; //1-100

```
if(loveScore>70){  
    alert("Your love score is: "+loveScore+"%. You love each other like Kanye loves Kanye");  
}  
if(loveScore>30 && loveScore<=70){  
    alert("Your love score is: "+loveScore+"%. You are lucky");  
}  
else{  
    alert("Your love score is: "+loveScore+"%. You go together like oil and water.");  
}
```

Comparison operators compare two values and give back a boolean value: either `true` or `false`. Comparison operators are used in [decision making](#) and [loops](#).

Operator	Description	Example
<code>==</code>	Equal to: <code>true</code> if the operands are equal	<code>5==5; //true</code>
<code>!=</code>	Not equal to: <code>true</code> if the operands are not equal	<code>5!=5; //false</code>
<code>===</code>	Strict equal to: <code>true</code> if the operands are equal and of the same type	<code>5==='5'; //false</code>
<code>!==</code>	Strict not equal to: <code>true</code> if the operands are equal but of different type or not equal at all	<code>5!=='5'; //true</code>
<code>></code>	Greater than: <code>true</code> if the left operand is greater than the right operand	<code>3>2; //true</code>
<code>>=</code>	Greater than or equal to: <code>true</code> if the left operand is greater than or equal to the right operand	<code>3>=3; //true</code>
<code><</code>	Less than: <code>true</code> if the left operand is less than the right operand	<code>3<2; //false</code>
<code><=</code>	Less than or equal to: <code>true</code> if the left operand is less than or equal to the right operand	<code>2<=2; //true</code>