1. How do you declare a Variable?

First you have to specify the type of variable, leave at least one space, then define a name for the variable and end the line with a semicolon (;). You can declare a variable using "var", "let" and "const".

Once you have typed the variable name, you write equals sign (=) and then you type the value you want to give it.

Examples:

var myName = 'Anna-Louisa Tursman';

var myAge = 19;

---

2. Variable Types: Numbers, Strings, Booleans and arrays

Numbers: you can store either whole numbers like 7 or decimal numbers like 11.25. When you give a variable a number value, you don't add quotes.

Strings: You give a variable a string value which means pieces of text and wrap it in single or double quote marks. Example:

var myHobby = 'I went outside for a jog';

Booleans: means true or false values and they can have two values true or false. You use them to test a condition, after which code is run as appropriate. Example:

var test = 2 < 11;

This is using the "less than" operator (<) to test whether 2 is less than 11. As you might expect, it returns true, because 2 is less than 11!

Arrays: It's an object that contains many values enclosed in square brackets and separated by commas. Typically used to contain many strings or different values. Examples:

var myNameArray = ['Chloe', 'Bailey', 'Juliana'];

var myAgeArray = [11, 16, 38];

---

3. What is a Function?

Functions are blocks of code that are reusable and you can write it once and run it over and over again, not needing to keep repeating code all the time. That's very handy. You can define functions in many ways.

---

4. List some arithmetic operators?

Addition, subtraction, multiplication, division, exponentiation, and modulus operations.

---

5. What are assignment operators?

You use assignment operators to assign values to variables. Example using the assignment operator (=) to assign the value 29 to a variable called x::

int x = 29;

Assignment operators:

=

+=

-=

*=

/=

%=

&=

|=

^=

>>=

<<=

---

6. Explain what is a loop?

A loop is a programming structure that allows you to keep running a piece of code repeatedly, until a certain condition is met.
for (var i = 1 ; i < 21 ; i++) { console.log(i) }

You can use it to cycle through values, add sums of numbers, repeat functions, and many other things.

---

7. Error Types-Syntax and Logic?

You meet these errors Types-Syntax or Logic when you do a mistake in coding. Syntax errors do not let the program to run at all or stop working part way through and you will typically get error messages too. But you can fix them with the right tools and knowing what those errors mean.

Logic errors appear when the syntax is correct but the code is not what you wanted it to be, which means that the program runs successfully but gives wrong results. These errors are harder to fix because there are no error messages which tell you what is wrong and how to fix it.