Session 1: Assignments

1. Search and Answer the following questions:

* How to check a variable’s type?

Javascript provides 2 operators to check the type of a given value :

* + typeof : This checks whether the value is one of the primitive data types. It **will return a string specifying the type** — "undefined" / "string" / "number" / "boolean" / "object" etc.
  + instanceof : This checks the "kind" of an object. For example, Javascript arrays are basically objects. Using this we can check whether a given value represents an array.

**will return a boolean true / false** depending on whether the value is an instance of a given object or not.

* In what cases, you will get ***SyntaxError*** from the compiler telling you that some of your variables have **invalid names**? Can you give 3 different examples of **invalid names**?

To check the valid characters for JavaScript variable names, you should follow the below given naming conventions, which discuss about other rules to name a variable:

* Name can begin with $ and \_ characters, for example, \_result.
* You should not use any of the JavaScript reserved keywords as a variable name. These keywords are mentioned in the next section. For example, break or boolean variable names are not valid.
* JavaScript variable names should not start with a numeral (0-9). They must begin with a letter or an underscore character. For example, 123test is an invalid variable name but \_123test is a valid one.
* JavaScript variable names are case-sensitive. For example, Name and name are two different variables

Example 3 names: 1example, if, let,…

1. Write a program that calculates the **area** of a **circle**. The circle radius is entered by users

Expected screen output:

|  |  |
| --- | --- |
| https://lh3.googleusercontent.com/xSU3Lw0uoSi8-8KaU2xFK1LfOtAsZ19ZXD55zo7hCAegKU-h7DSoBv3X2pV-E7IgodNnYJe7WxhfaSC-Bz9ENpYD1e6k3sDW5z4eWduPzRl7naxqAXhFlrjUafHsST2UHEHWvHBy | https://lh5.googleusercontent.com/0Ck_41BQpwgMDZOU6-46uOVDWBUG1oklx-ubAisFuDqPlRoUbtmJKK3suQWEqxOCeN5Z42kupRttYP47r245FUqylIvO6e5hiQda5s0X_76M1iBF3oydtn167JX4CczFatnZ76qS |
| # This one is fine | # This one is a little bit better |

1. Write a program that converts **Celsius** (0C) into **Fahrenheit** (0F)

Expected screen output:

|  |  |
| --- | --- |
| https://lh4.googleusercontent.com/07q9ldZPlQ0f4_6GwYdWu8Emyy9QM6BTj6nXjk5omt6pgEODdxnLjzIQqgwMxensvhE_7f3XGKBOt9o7QX5i53yrXc8GXq8G3d340_RdymmqyhfsNIEqIj9fY7muNHDk9uLCHmKx | https://lh3.googleusercontent.com/V68k8hXDlo9lntqzVmj6jR_VBxkUqzFIRODHvWbErFWHTDSM8eBOoA4NtrmUGFLyITfe2EcNjAtgUraQbNt7LZIt3nKibXFTXVqPU22C-oWS8APuE4Utt7G8MZ5He_52NdkJMyQs |
| # This one is fine | # This one is a little bit better |