

SCHOOL OF COMPUTING


ST0523 Fundamentals of Programming

Practical 1: Introduction to JavaScript Programing

What you will learn / do in this lab

- Write the code to print out a specific output using escape characters
- Identify correctly the validity of a variable name
- Identify the most suitable data type of a given category
- Trace a program to determine what is the final output of the code

- 1) Write JS code to display the following output using a **single** console.log statement:

| | Output should be as shown below | Code |
|-----|---|------|
| (a) | <pre>"The quick brown fox jumps over the lazy dog."</pre> | |
| (b) |  | |
| (c) | <pre>I've tried so hard and got so far and in the end it doesn't even matter.</pre> | |

- 2) Identify and state reason(s) if the following variable names is valid/invalid.

| | Variable Name | Valid / Invalid | Reason(s) |
|-----|-----------------|-----------------|-----------|
| (a) | n@m3 | | |
| (b) | while | | |
| (c) | 1234Hi5 | | |
| (d) | \$I__I\$ | | |
| (e) | P0ck3t | | |
| (f) | Mr. Molly | | |
| (g) | switch | | |
| (h) | _MannerMakesMan | | |

3) Determine the most suitable data type for the following categories:

| | Category | Data Types |
|-----|--|------------|
| (a) | Mailing Address | |
| (b) | Body Mass Index (BMI) | |
| (c) | Credit Card Number (16 digits) | |
| (d) | Is a year a leap year | |
| (e) | Amount of Water in Water Bottle | |
| (f) | Does password contains at least 8 characters | |
| (g) | Movie Title & Director | |
| (h) | Year Published of a Book | |

4) Trace the following code to determine the final value printed. You are to treat each part independently.

| | Program | Output |
|-----|--|--------|
| (a) | <pre>var x = 4; x = 5; console.log(x);</pre> | |
| (b) | <pre>var x, y; x = 5; y = x; console.log(y);</pre> | |
| (c) | <pre>var x, y; y = x; console.log(y);</pre> | |
| (d) | <pre>var x, y, z; z = 2; y = z; x = y; console.log('z');</pre> | |

- 5) Using Visual Studio, write a program using only 1 **console.log** to output the following program below:

```
Module Code\Name: ST0523\"Fundamentals of Programming"
  CA 1                :40%
  CA 2                :20%
  EXAM                :40%
  Total----->:100%
```

-- End --