Programming Fundamentals – III & Arrays 🚀

Code Repository

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bit.ly/javascaler

Lecture

do-while

switch case

input char

array basics

linear search

binary search

Warm Up!

Print Temperature Conversion Table

32 °F — 0 °C
40 °F — 4.4 °C
50 °F — 10 °C
60 °F — 15.5 °C
70 °F — 21.1 °C
80 °F — 26.6 °C

$$F = \frac{9}{5}C + 32$$

wecapable.com

Celsius to Fahrenheit Formula

do-while-loop

exit controlled loop

# ~~break;~~

continue;

Switch Case

```java
class HelloWorld {
    public static void main( String args[] ) {

        int weather = 2;
        //passing variable to the switch
        switch (weather)
        {
            //comparing value of variable against each case
          case 0:
            System.out.println("It is Sunny today!");
            break;
          case 1:
            System.out.println("It is Raining today!");
            break;
          case 2:
            System.out.println("It is Cloudy today!");
            break;
            //optional
          default:
            System.out.println("Invalid Input!");
        }
    }
}
```

Do While Loop
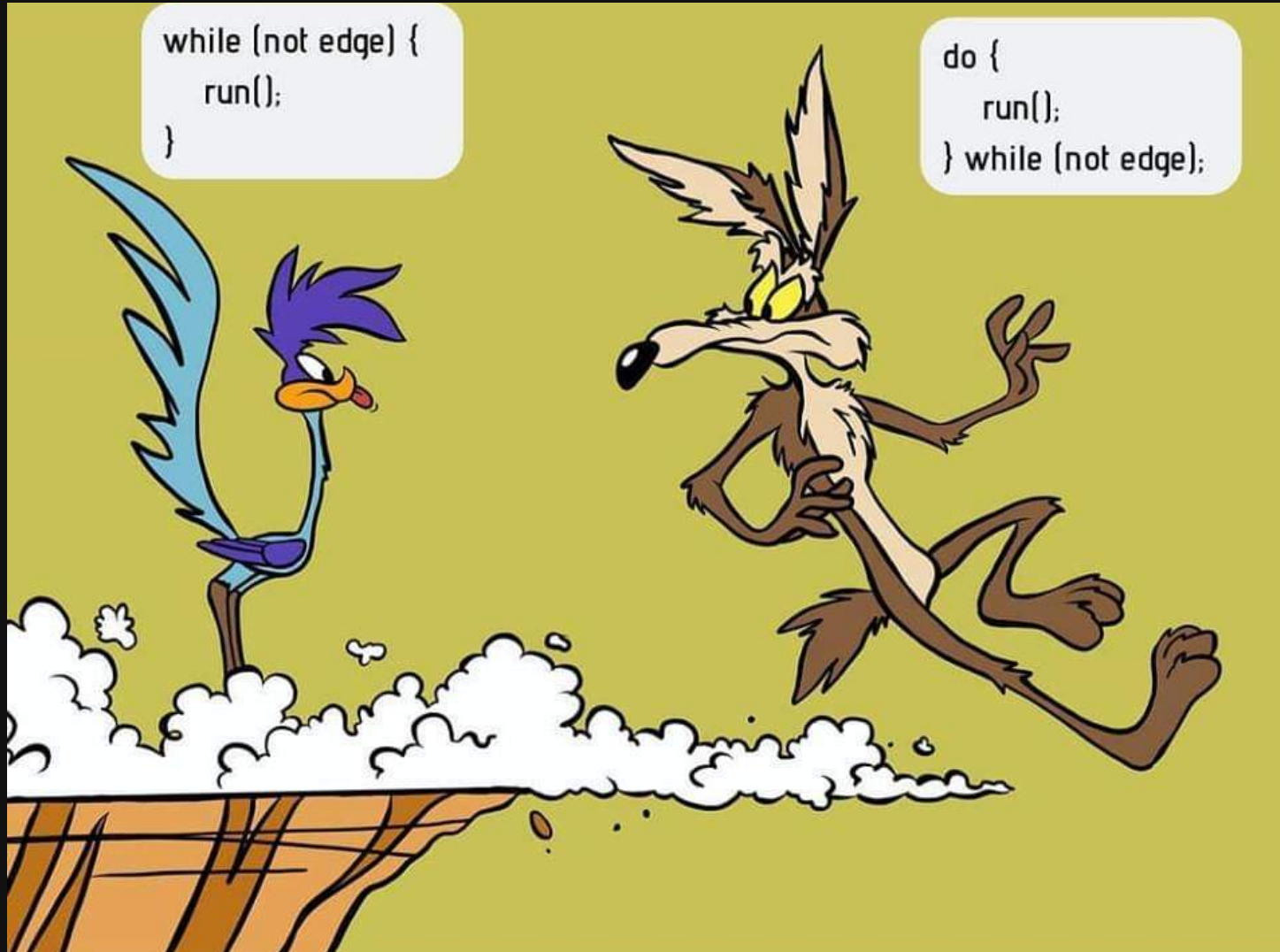
Code Demo!

💡 Fibonacci Series

Print first N term of fibonacci series.

Example

N = 7

Output

0,1,1,2,3,5,8 ....

💡 Upper Lower

Take input a character, print Upper case or lowercase depending upon the type of character. Print Other if it it not a-z or A-Z.

Example

a

Output

lowercase

Arrays Introduction

An **array** is a collection of elements of the same type placed in contiguous memory locations.

- Creation
- Input
- Output
- Update

Demo

Searching in Arrays

Linear Search

Searching algorithm to find the index of element in a given array.

Binary Search

Efficient searching algorithm to find the index of element in a given **sorted** array.

💡 Largest Number

Given N numbers, find the largest number in the array.

Sample Input

N = 7

10, 20, 30, 400, 50, 20, 70

Sample Output

400

💡

Time To Try!

🕐 **8 Mins**