# Big Data with Python

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#### Motivational video

- 1. Coding is not difficult
- 2.

#### What did we learn in the previous class?

- 1. Flow Chart
- 2. Print value (integer, float, string)
- 3. Use Python as a calculator
- 4. Variable and Value
- 5. Visualization: variable and value

# Variable Type

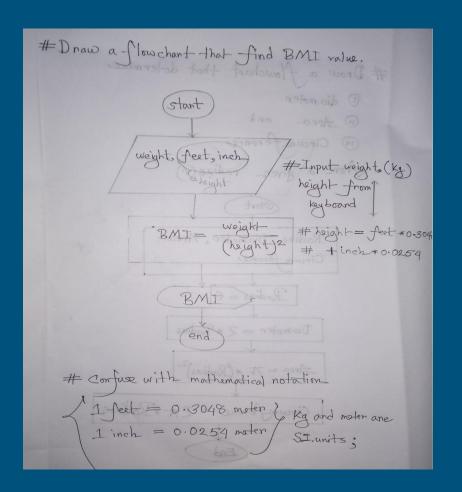
```
1. var = 4 # type(var)
2. var = 4.5 # type(var)
3. var = 'Odin' # type(var)
4. var = 4+11 # type(var)
5. var = 4.75+81 # type(var)
6. var = '4' + '5' # type(var)
```

#### Practice Problem

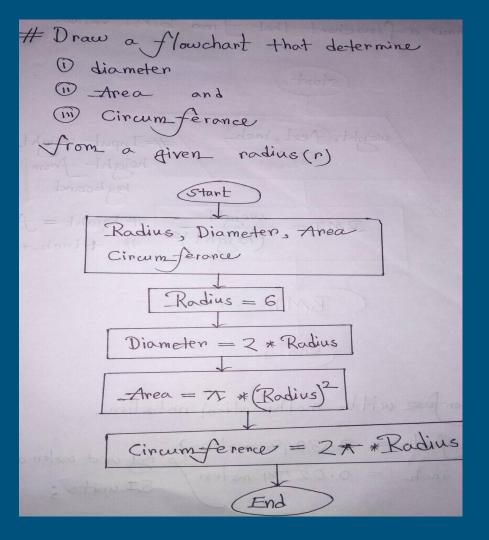
- Find <u>BMI (Body Mass Index)</u> where weight (w) and height (h) are given.
- 2. Convert celsius (C) to kelvin (K) and vice-versa.
- 3. Find the area of circle where radius is given.

#### BMI Calculation

```
weight = float(input()) # kg
feet = float(input())
                        # feet
inch = float(input())
                        # inch
height = (feet * 0.3048) + (inch * 0.0254)
BMI = weight / (height**2.0)
print('You BMI is: {}'.format(BMI))
```



# Circle Property



## Types of Operator (1)

Operator: https://www.tutorialspoint.com/python/python\_basic\_operators.htm

#### Practice (Compare):

- 1. print(5>6)
- 2. print(5>=5)
- 3. print(51 <= 6)
- 4. print(5==6)
- 5. print(5!=6)
- 6. print(5<6)

# Types of Operator (2)

```
4. y = 4
    print(2<v<9)
5. v = 2
    print(2<=v<9)
6. v = 2
    print(2<v<=9)
```

## Types of Operator (3)

#### Practice (Logical):

- 1. print( (5!=6) && (6==5) )
- 2. print((5!=6)||(6==5))
- 3. print( (5==6) || (6==5) )

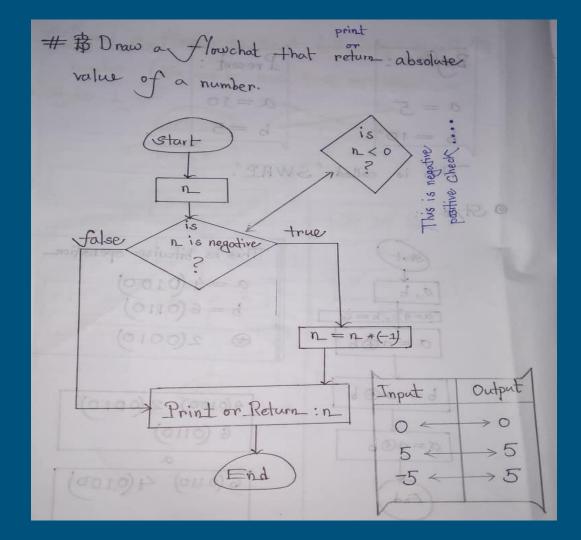
p	q	pvd
T	T	T
T	F	F
F	T	F
F	F	F

p	q	pvq
T	T	T
T	F	T
F	T	T
F	F	F

#### Conditional-1

# Draw a flow chart that determined wheather a value is positive on negative? start # input from keyboard negative

#### Conditional-2



#### Practice / Assignment

- 1. Determine a number whether it is odd or even.
- 2. Find <u>leap year</u> from a given year.
- 3. <u>Fizz-Buzz</u> ( If a number is divided by both 3 and 5 is called "fizz-buzz", but a number is only divided by only 3 is called "fizz" and a number is only divided by 5 is called "buzz". Otherwise is "None". )
- 4. Input a number, check whether it is positive or negative.
- 5. Input a number, print the absolute value of that number.
- 6. Input two numbers, tell which one is greater.
- 7. Input two numbers, tell which one is less.
- 8. Input three numbers, tell which one is greater.
- 9. Input three numbers, tell which one is less.

## Practice / Assignment

- 10. Input a character, determine whether it is vowel or not.
- 11. Coin Change [ Easy Greedy ]

# Contract your instructor!

Find Me: <a href="http://rafsanjani.pythonanywhere.com/contact">http://rafsanjani.pythonanywhere.com/contact</a>

Course Website: <a href="https://mrzresearcharena.github.io/Big-Data-using-Python">https://mrzresearcharena.github.io/Big-Data-using-Python</a>

# Thank you!