



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

1. Find BMI (Body Mass Index) 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

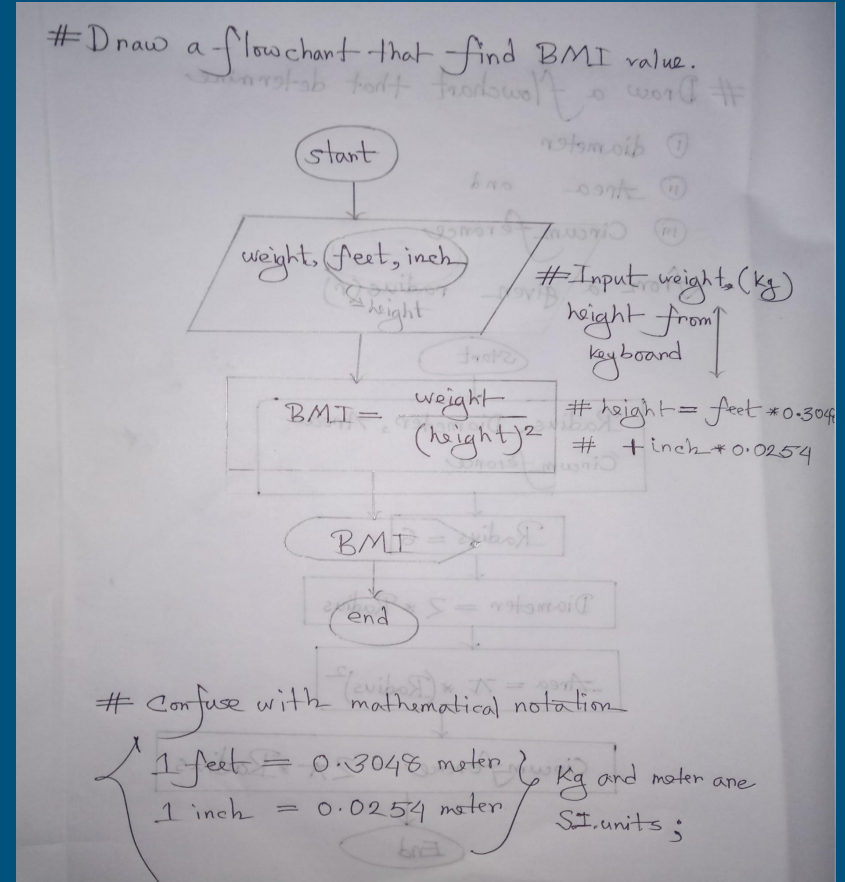
feet = float(input()) # feet

inch = float(input()) # inch

height = (feet * 0.3048) + (inch * 0.0254)

BMI = weight / (height**2.0)

print('You BMI is: {}'.format(BMI))

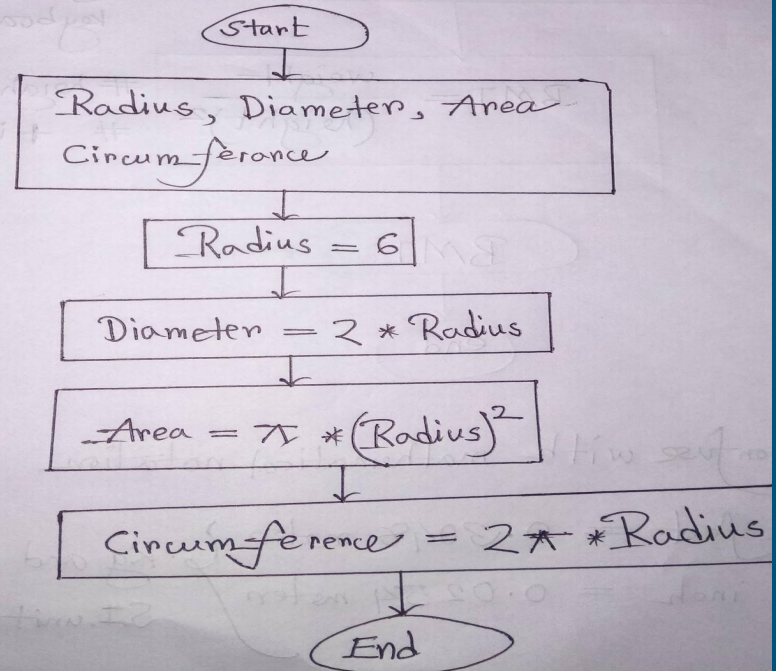


Circle Property

Draw a flowchart that determine

- ① diameter
- ② Area and
- ③ Circumference

from a given radius (r)



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. `v = 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):

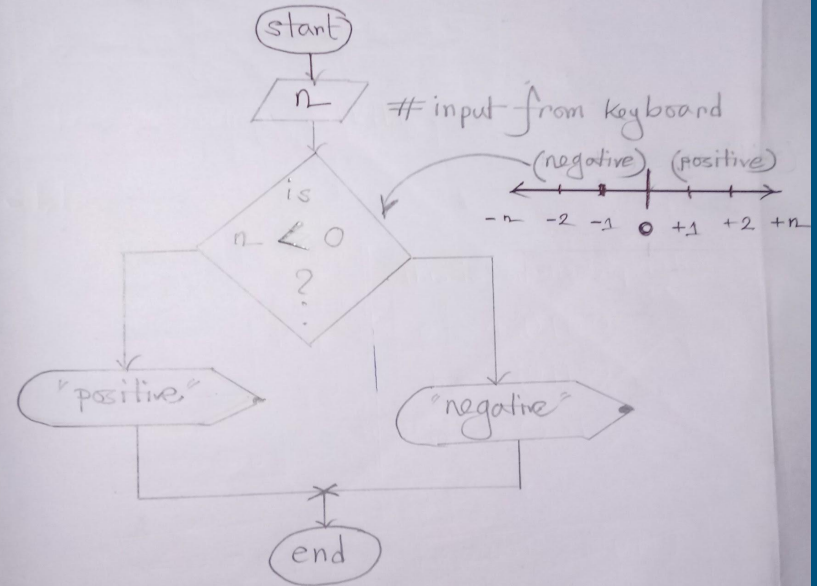
1. `print((5!=6) && (6==5))`
2. `print((5!=6) || (6==5))`
3. `print((5==6) || (6==5))`

p	q	$p \wedge q$
T	T	T
T	F	F
F	T	F
F	F	F

p	q	$p \vee q$
T	T	T
T	F	T
F	T	T
F	F	F

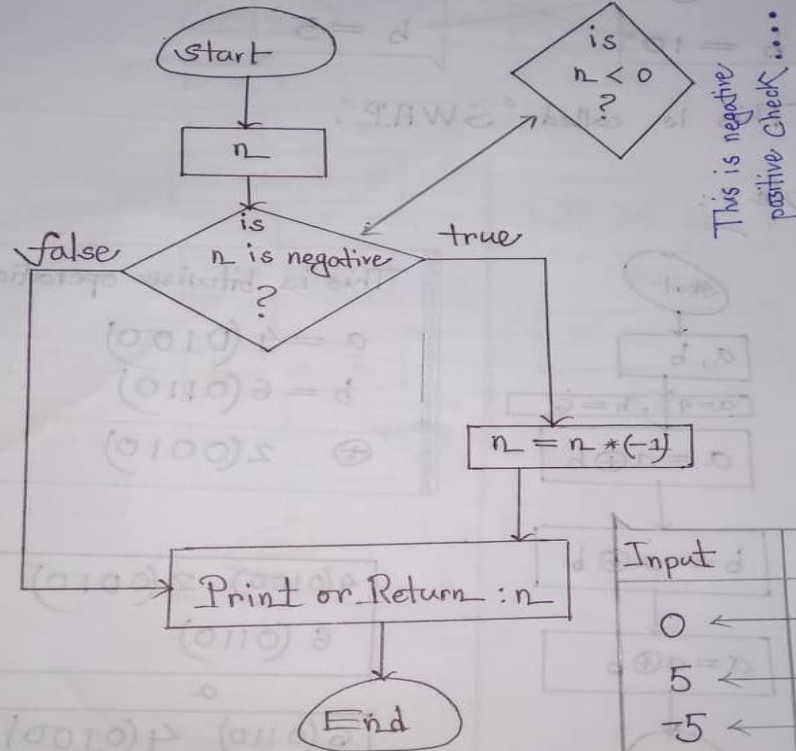
Conditional-1

Draw a flow chart that determines whether a value is positive or negative?



Conditional-2

Draw a flowchart that print or return absolute value of a number.



Practice / Assignment

1. Determine a number whether it is odd or even.
2. Find leap year from a given year.
3. Fizz-Buzz (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: <http://rafsanjani.pythonanywhere.com/contact>

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



Thank you!