JIUE3108 Introduction to Computing Using Python

Programming Homework 2

Deadline: 2023.9.3 Midnight (SUN)

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Q1. Type Casting

```python
x is 1 (integer), y is '3' (string), z is '4.45346' (string)

1) Make x, y, z to integer. Print the value and type of x, y, z.
2) Make x, y, z to float. Print the value and type of x, y, z.
3) Make x, y, z to string. Print the value and type of x, y, z.
```

- Hint
  - You can use ‘`type()`’ to print the type of variables.
  - To change ‘1.2’ to an integer, you should change the string to float first and then change to an integer.

Q1. Sample Output

```
python
== 1) The type of x, y, z ==
1 3 4
<class 'int'>
<class 'int'>
<class 'int'>

== 2) The type of x, y, z ==
1.0 3.0 4.45346
<class 'float'>
<class 'float'>
<class 'float'>

== 3) The type of x, y, z ==
1 3 4.45346
<class 'str'>
<class 'str'>
<class 'str'>
```

Q2. String

```python
string1 = LetUsTransformTheWorld
string2 = jakarta international university
```

1) Reverse the `string1` using index slicing. Ex) [?:?:?]
2) Make `string1` as 'Unmo' using index slicing. Ex) [?:?:?]
3) Print the length of `string1, string2`
4) Make `string2` as 'Jakarta International University' using string methods.
5) Make `string2` as capital letters using string methods.
6) Replace the word 'jakarta' to 'The best jakarta' in `string2.`

Q2. Sample Output

```python
1)  dlroWehTmrofsnarTsUteL
2)  Unmo
3) Length of string1 : 22 , Length of string2:  32
4)  Jakarta International University
5)  JAKARTA INTERNATIONAL UNIVERSITY
6)  The best jakarta international university
```

Q3. Boolean

```python
```

Translate the following statements into Python Boolean expressions and evaluate them:

(a) The sum of 2 and 2 is less than 4.

(b) The value of 7 // 3 is equal to 1 + 1.

(c) The sum of 3 squared and 4 squared is equal to 25.

(d) The sum of 2, 4, and 6 is greater than 12.

(e) 1387 is divisible by 19.

(f) 31 is even. (Hint: what does the remainder when you divide by 2 tell you?)

(g) The lowest price among $34.99, $29.95, and $31.50 is less than $30.00.