JLUFE **Fall 2021(Sep-Jan)**

Homework Assignment Report

JILIN UNIVERSITY OF FINANCE AND ECONOMICS

School of International Exchange

BSc in Bachelor degree in e-commerce

(2021)

MODULE: Intelligent Technology

Homework Assignment: 01

Variables

15/10/2021

Submitted by:

Wendy(陈芃佳) 0318031902145 (1921)
QQ: 1692677159 | Github ID: Wendy729

Instructions:

1. I have added tips and required learning resources for each question, which helps you to solve the problems.
2. Finish the assignment on your **OWN**. **Any student find copying/sharing from classmates or internet will get '0' points!!!**
3. After `Accepting this assignment` from → GitHub Clasroom link (https://classroom.github.com/a/NAS4shz_), Github will create private repository of the assignment in your GitHub Classroom account.
4. In your repository `Clone` → `Download ZIP` in your computer.
5. Change your → **College**, **Major**, **Name**, **Student number**, **Class number**, **QQ number** and **GitHub ID**
6. Once you finish the Assignment convert your .ipynb file into PDF (https://github.com/milaan9/91_Python_Mini_Projects/tree/main/001_Convert_IPython_to_PDF) (both **.ipynb** and **.pdf** file will be required!)
7. To submit your assignment, go to GitHub Classroom repository and `Add file` → `Upload files` → `Commit changes`
   A. Replace the question (**.ipynb**) file with your solution (**.ipynb**) file.
   B. Also, upload (**.pdf**) converted file of your solution (**.ipynb**) file.

Python Assignment 01

Part A → Variables Level 1

1. Write a python comment saying `Python variables and Constants`
2. Declare a `first_name` variable and assign a value to it
3. Declare a `last_name` variable and assign a value to it
4. Declare a `full_name` variable and assign a value to it
5. Declare a variable `am_i_happy` and assign a value to it
6. Declare multiple variable on one line

In [19]:

```
# Solution:
print("Python variables and Constants")
first_name="Pengjia"
last_name="Chen"
full_name="Chen Pengjia"
am_i_happy="Yes"
print("first_name\nlast_name\nfull_name\nam_i_happy")
```

```
Python variables and Constants
first_name
last_name
full_name
am_i_happy
```

Part B → Variables Level 2

> **Note:** Please create new cell for each question

1. Check the data type of all your variables using type() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/064_Pyt built-in function
2. Using the len() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/040_Pyt built-in function, find the length of your first name
3. Compare the length of your `first_name` and your `last_name`
4. Declare **7** as `num_1` and **5** as `num_2`
   A. Add `num_1` and `num_2` and assign the value to a variable `total`
   B. Subtract `num_2` from `num_1` and assign the value to a variable `difference`
   C. Multiply `num_2` and `num_1` and assign the value to a variable `product`
   D. Divide `num_1` by `num_2` and assign the value to a variable `division`
   E. Use modulus division to find `num_2` divided by `num_1` and assign the value to a variable `remainder`
   F. Calculate `num_1` to the power of `num_2` and assign the value to a variable `exp`
   G. Find floor division of `num_1` by `num_2` and assign the value to a variable `floor_division`

5. Use the built-in input() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/032_Pyt function to get first name, last name, country and age from a user and store the value to their corresponding variable names
6. The radius of a circle is **36 meters**.
   A. Calculate the area of a circle and assign the value to a variable name of `area_of_circle` by taking user input() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/032
   B. Calculate the circumference of a circle and assign the value to a variable name of `circum_of_circle` by taking user input() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/032
   C. Take radius as user input() (https://github.com/milaan9/04_Python_Functions/blob/main/002_Python_Functions_Built_in/032 and calculate the area.
7. Run help (`keywords`) in Python shell or in your file to check for the Python reserved words or keywords

In [24]:

```
# Solution :
first_name="Pengjia"
last_name="Chen"
full_name="Chen Pengjia"
am_i_happy="Yes"
print("first_name")
print(type(first_name))
print("last_name")
print(type(last_name))
print("full_name")
print(type(full_name))
print("am_i_happy")
print(type(am_i_happy))
```

```
first_name
<class 'str'>
last_name
<class 'str'>
full_name
<class 'str'>
am_i_happy
<class 'str'>
```

In [9]:

```
len("ChenPengjia")
```

Out[9]:

```
11
```

In [25]:

```
first_name="Pengjia"
last_name="Chen"
print('Pengjia'<'Chen')
print('Pengjia'>'Chen')
print('Pengjia'=='Chen')
```

```
False
True
False
```

In [8]:

```
num_1=int(7)
num_2=int(5)
total=num_1+num_2
print("total:",num_1+num_2)
```

```
total: 12
```

In [9]:

```
num_1=int(7)
num_2=int(5)
difference=num_1-num_2
print("difference:",num_1-num_2)
```

```
total: 2
```

In [10]:

```
num_1=int(7)
num_2=int(5)
product=num_1*num_2
print("product:",num_1*num_2)
```

```
product: 35
```

In [13]:

```
num_1=int(7)
num_2=int(5)
division=num_1/num_2
print("division:",num_1/num_2)
```

```
division: 1.4
```

In [26]:

```
num_1=int(7)
num_2=int(5)
remainder=num_1%num_2
print("remainder:",num_1%num_2)
```

```
remainder: 2
```

In [19]:

```
num_1=int(7)
num_2=int(5)
exp=num_1**num_2
print("exp:",num_1**num_2)
```

```
exp: 16807
```

In [27]:

```
import math
num_1=int(7)
num_2=int(5)
floor_division=num_2//num_1
print("floor_division:",num_2//num_1)
```

```
floor_division: 0
```

In [4]:

```
firstname = input("Enter First Name: ")
lastname = input("Enter Last Name: ")
country=input("my country:")
age=int(input("my age:"))
print(firstname,lastname,country,age)
```

```
Enter First Name: Pengjia
Enter Last Name: Chen
my country:China
my age:20
Pengjia Chen China 20
```

In [2]:

```
PI=3.14
r=int(input("Enter r"))
area_of_circle=PI*(r*r)
print(area_of_circle)
```

```
Enter r36
4069.44
```

In [3]:

```
PI=3.14
r=int(input("Enter r"))
circum_of_circle=2*PI*r
print(circum_of_circle)
```

```
Enter r36
226.08
```

In [6]:

```
PI=3.14
r=int(input("Enter r"))
area=PI*(r*r)
print(area)
```

```
Enter r36
4069.44
```

In [7]:

```
help ("keywords")
```

```
Here is a list of the Python keywords.  Enter any keyword to get more help.

False               class               from                or
None                continue            global              pass
True                def                 if                  raise
and                 del                 import              return
as                  elif                in                  try
assert              else                is                  while
async               except              lambda              with
await               finally             nonlocal            yield
break               for                 not
```

In [ ]:

```

```