Learn2grow-December 2020

Python assessment:

1. Write a Python program to accept a filename from the user , check whether a file exists and print the extension of that.
2. **Type casting :** Read the input from user and check the date type and try to implement type casting of the value
3. **Variable** - assign value to variable and print the variable.
4. **String** :
    1. Write a Python program to replace a string "Python" with "Java" and "Java" with "Python" in a given string
    2. Write a Python program to calculate the length of a string
    3. write a Python program to reverse a string
5. **List :**
    1. Create a list and sum all the items in a list.
    2. Write a Python program to convert a list of characters into a string
6. **Dictionary :**
    1. Write a Python script to concatenate two dictionaries to create a new one.
    2. Write a Python script to check whether a given key already exists in a dictionary.
7. **Tuple:**
    Write a Python program to create a tuple
8. **Control and looping:**
    1. Print the number from 1 to 10 using **while**
    2. Write the program to **break** the loop if user given as input, if y **continue**
    3. Write a Python program to iterate over dictionaries using **for loops**
    4. Read two value and check which number is greater.
9. **File handling:**
    Write a program to read the file and print line by line, append in file and close the file.

1.Accepting file name and checking the extension:

```
File  Edit  Format  Run  Options  Window  Help
import os.path
from os import path

def search(filename):
    ext=filename.split(".")
    a=str(path.exists(filename))
    if (a=='True'):
        print("file extension is '.",ext[-1],"'")
    else:
        print("file not found")
fname=input("enter filename")
search(fname)
```

```
========== RESTART: C:/Users/AKALABI/Desktop/py1.py ==========
enter filenameFile_handling.txt
file extension is '. txt '
>>>
```

2.Type casting

```
n=int(input("enter number"))
if(type(n)==int):
    print(float(n))
```

```
========== RESTART: C:/Users/AKALABI/Desktop/py2.py ==========
enter number33
33.0
```

3.Variable

```
>>> variable=123
>>> print(variable)
123
```

4.Strings

```
>>> str="1.python,2.java"
>>> new=str.replace("java","%temp%").replace("python","java").replace("%temp%","python")
>>> print(str)
1.python,2.java
>>> print(new)
1.java,2.python
>>> len(new)
15
>>> x="hello world"[::-1]
>>> print(x)
dlrow olleh
>>>
```

5.List

```
>>> list=[100,20,70]
>>> sum(list)
190
>>> listl=['a','b','c','d']
>>> string=''.join(listl)
>>> print(string)
abcd
>>>
```

6.Dictionary

```
dicl={1:'a',2:'b'}
dic2={3:'c',4:'d'}
dicl.update(dic2)
newdic=dicl
print(newdic)
def checkKey(key):
        if key in dicl:
                print("present")
        else:
                print("not present")
inputKey=int(input("enter key"))
checkKey(inputKey)
```

```
{1: 'a', 2: 'b', 3: 'c', 4: 'd'}
enter key2
present
>>>
================== RESTART: C:/Users/AKALABI/Desktop/py6.py ==================
{1: 'a', 2: 'b', 3: 'c', 4: 'd'}
enter key5
not present
```

7.Tuple

```
>>> tuple=('aa','bb')
>>> print(tuple)
('aa', 'bb')
>>>
```

8.Loops

8.1.

```
>>> i=1
>>> while(i<=10):
        print(i)
        i=i+1


1
2
3
4
5
6
7
8
9
10
>>>
```

8.2

```
while(True):
    uinput=input("enter 'input' to break the loop and y to continue:")
    if(uinput=='input'):
        break
    elif(uinput=='y'):
        continue
    else:
        print("enter valid input only")
```

```
enter 'input' to break the loop and y to continue:y
enter 'input' to break the loop and y to continue:n
enter valid input only
enter 'input' to break the loop and y to continue:y
enter 'input' to break the loop and y to continue:
```

8.3.

```
>>> Dict={'a':1,'b':2,'c':3,'d':4,'e':5}
>>> for i in Dict:
        print(i)


a
b
c
d
e
```

8.4.

```
num1=int(input("Enter number 1:"))
num2=int(input("Enter number 2:"))
if(num1>num2):
    print(num1,"is greater")
else:
    print(num2,"is greater")
```

```
Enter number 1:200
Enter number 2:100
200 is greater
>>>
========== RESTART: C:/Users/AKALABI/Desktop/8-4.py ==========
Enter number 1:5
Enter number 2:6
6 is greater
>>>
```

9.File handling

```
def main():
    f=open("File_handling.txt","w+")
    f.write("File handling")
    f.close()

    f=open("File_handling.txt","a")
    f.write("\n In python")
    f.close()

if __name__=="__main__":
        main()
```