Class01

September 5, 2024

[1]:
```
print("Welcome to NUCOT")
```

```
Welcome to NUCOT
```

[2]:
```
print("Welcome to Data Science Program")
```

```
Welcome to Data Science Program
```

[3]:
```
print("$")
```

```
$
```

[4]:
```
print("$"* 3)
```

```
$$$
```

[8]:
```
var1 = "Mike"
print(var1)
```

```
Mike
```

[10]:
```
var2 = 6
print(var2)
```

```
6
```

[12]:
```
number = input("What is your favourite number?")
print(number)
```

```
What is your favourite number? 79887098
```

```
79887098
```

[14]:
```
name = input("What is your name?")
print(name)
```

```
What is your name? XQYH
```

```
XQYH
```

[18]:
```
age = input("Enter your age")
age = int(age)
print("You are ", age*12, "months old")
```

```
Enter your age 30
```

```
You are  360 months old
```

[20]:
```
age = int(input("Enter your age"))
print("You are ", age*12, "months old")
```

```
Enter your age 30
```

```
You are  360 months old
```

[32]:
```
num = int(input("Enter your number"))
if num > 0:
    fac = 1
    for i in range (1,num+1):
        fac = fac * i
    print("answer", fac)
elif num < 0:
    print("Invalid input")
else:
    print("Zero factorial is 1")
```

```
Enter your number 6
```

```
answer 720
```

[34]:
```
# change data types
integer = 1
float_num = 1.6
a = "Mike"
boolean = True
```

[36]:
```
print(type(integer))
```

```
<class 'int'>
```

[38]:
```
print(type(float_num))
```

```
<class 'float'>
```

[40]:
```
print(type(a))
```

```
<class 'str'>
```

[42]:
```
print(type(boolean))
```

```
<class 'bool'>
```

[44]:
```
# Arthemetic oprations
a = 6
b = 7
```

[46]:
```
add = a+b
print(add)
```

```
13
```

[48]:
```
sub = a - b
sub
```

[48]:
```
-1
```

[52]:
```
float = a // b
float
```

[52]:
```
0
```

[54]:
```
div = a/b
div
```

[54]:
```
0.8571428571428571
```

[58]:
```
rem = a%b # remainder value is shown as output
rem
```

[58]:
```
6
```

[62]:
```
power = a ** b # a to the power of b
power
```

[62]:
```
279936
```

[64]:
```
print((4*5)-9 + 6/7) # PEDMAS
```

```
11.857142857142858
```

[66]:
```
# string Manipulation
flavour = input("enter you favourite flavour")
dessert_type = input("enter your favourite dessert")
print("You Ordered", flavour+ "-"+dessert_type)
```

```
enter you favourite flavour vanilla
enter your favourite dessert ice cream

You Ordered vanilla-ice cream
```

[68]:
```
string = "I have not failed. I've just found 10,000 ways that won't work. -␣
↪Thomas A. Edison"
```

[70]:
```
len(string)
```

[70]: 82

[72]:
```
string[-82]
```

[72]: 'I'

[74]:
```
string[-1]
```

[74]: 'n'

[76]:
```
string[0]
```

[76]: 'I'

[78]:
```
string[2]
```

[78]: 'h'

[80]:
```
string[1]
```

[80]: ' '

[82]:
```
slice = string[0:64]
slice
```

[82]: "I have not failed. I've just found 10,000 ways that won't work. "

[84]:
```
string[0:]
```

[84]: "I have not failed. I've just found 10,000 ways that won't work. - Thomas A. Edison"

[90]:
```
string[:-1]
```

[90]: "I have not failed. I've just found 10,000 ways that won't work. - Thomas A. Ediso"

[92]:
```
string[:64]
```

[92]: "I have not failed. I've just found 10,000 ways that won't work. "

[94]:
```
str = "John! did you attend the conference on advanced machine learning"
print("Lincon" in str)
```

```
False
```

[96]:
```
print("John" in str)
```

```
True
```

[100]:
```
small = "i am a student of NUCOT"
print(small.upper())
```

```
I AM A STUDENT OF NUCOT
```

[102]:
```
print(small.lower())
```

```
i am a student of nucot
```

[104]:
```
some_sentence = "          This a moment to cherish!             "
some_sentence.rstrip()
```

[104]: '   This a moment to cherish!'

[106]:
```
some_sentence.lstrip()
```

[106]: 'This a moment to cherish!   '

[108]:
```
some_sentence.strip()
```

[108]: 'This a moment to cherish!'

[110]:
```
string1 = "This is a sample sentence"
string1.count('i')
```

[110]: 2

[112]:
```
string1.count('i', 4,10)
```

[112]: 1

[114]:
```
a = "This is a coding class in Python"
a.count("o")
```

[114]: 2

[116]:
```
a.count('o',10)
```

[116]: 2

[118]:
```
len(a)
```

[118]: 32

[120]:
```
A = "Data"
B = "Analysis"
C = "Pandas"
print("{0} {1} using {2}". format(A,B,C))
```

```
Data Analysis using Pandas
```

[ ]: