Python ASS – 2

-Yash Bhakta

Q1. Declare a multiline string and print it.

Code:-

multiline\_string = """This is a

multiline string"""

print(multiline\_string)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\1.py"

Create a program that demonstrates the use of append(), pop(), and sort()

methods in a list.this is call multiline string in python..

Q2. Access and print the third character from a given string

Code:-

string = "Yash"

print(string[2])

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\2.py"

s

Q3. Slice a string to print only the first five.

Code:-

string = "Hello, World!"

print(string[:5])

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\2.py"

Hello

4. Write a program to demonstrate negative indexing in a string

Code:-

sample\_string = "Yash Bhakta"

print(sample\_string[-1])

print(sample\_string[-2])

print(sample\_string[-3])

Negative indexing..

-11 index : Y

-10 index : a

-9 index : s

-8 index : h

-7 index :

-6 index : B

-5 index : h

-4 index : a

-3 index : k

-2 index : t

-1 index : a

5. Concatenate two strings using both + and .join().

l="Yaashh Bhakta"

n=str(input("Enter a number from : "))

i=0

c=0

while i<len(l):

    if n==l[i]:

        print(n,'found on index',i)

        c+=1

    i+=1

print(n,"Occures",c,'times')

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\5.py"

Enter a lrtter from : a

a found on index 1

a found on index 2

a found on index 9

a found on index 12

a Occures 4 times

6. Count the occurrences of a specific character in a given string.

s = "Yash"

s1 = "Bhakta"

print("".join([s,s1]))

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\6.py"

YashBhakta

7. Convert a string to uppercase and lowercase

Code:-

sample\_string = "Yash Bhakta"

# Convert to uppercase

upper\_string = sample\_string.upper()

print("Uppercase:", upper\_string)

# Convert to lowercase

lower\_string = sample\_string.lower()

print("Lowercase:", lower\_string)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2>

Yash Bhakta

yash bhakta

YASH BHAKTA

8. Replace all occurrences of 'a' in a string with 'o'

Code:-

string = "Yaash Bhakta"

print(string)

target = "a"

replacement = "o"

string = string.replace(target, replacement)

print(string)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\8.py"

Yoosh Bhokto

9. Write a program to demonstrate the use of arithmetic operators in Python

Code:-

a = 15

b = 10

print(a+b)

print(a-b)

print(a\*b)

print(a/b)

print(a%b)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\9.py"

25

5

150

1.5

5

# MODULUS

a = 10

b = 20

print(a % b)

10.  Compare two numbers using comparison operators and print the results.

Code:-

a = 10

b = 20

print(a == b)

print(a != b)

print(a > b)

print(a < b)

print(a >= b)

print(a <= b)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\10.py"

Enter a number: 55

Enter another number: 55

Both are equal

Both are equal

11. Demonstrate the use of logical operators (and, or, not) with examples.

Code:-

# AND

a = 10

b = 20

c = 30

print(a < b and b < c)

# OR

a = 10

b = 20

c = 30

print(a < b or b > c)

# NOT

a = 10

b = 20

print(not a < b)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\11.py"

True

True

True

Flase

12. Write a Python program to check if a number is positive, negative, or zero using if statements

Code:-

a = int(input("Enter a number: "))

if a > 0:

    print("Positive")

elif a < 0:

print("Negative")

else:

    print("Zero")

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\12.py"

Enter a number: 5

Positive

13. Create a program that checks if a given number is even or odd.

Code:-

n = int(input("Enter a number: "))

if n%2==0:

    print("It is even")

else:

    print("It is odd")

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\13.py"

Enter a number: 5

It is odd

14. Write a Python program to find the largest among three numbers using if...elif...else.

Code:-

n = int(input("Enter a number: "))

s = int(input("Enter a number: "))

d = int(input("Enter a number: "))

if n>s:

    if n>d:

        print(n,"is gratest")

    else:

        print(d,"is greatest")

else:

    if s>d:

        print(s,"is gratest")

    else:

        print(d,"is greatest")

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\14.py"

Enter a number: 2

Enter a number: 6

Enter a number: 5

6 is gratest

15. Create a nested if condition to check if a person is eligible to vote (age ≥ 18) and is a citizen.

Code:-

n = int(input("your Age: "))

s = str(input("Are You a Citizen? (Yes/No): "))

if n>=18:

    if s=="Yes":

        print("You Are Eligible to Vote")

    else:

        print("You Are not Eligible to vote")

else:

    print("You Are not Eligible to vote")

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\15.py"

your Age: 18

Are You a Citizen? (Yes/No): Yes

You Are Eligible to Vote

16. Write a program that prints numbers from 1 to 10 using a while loop.

Code:-

i = 1

while i <= 10:

    print(i)

    i += 1

17. Create a program that prints the multiplication table of a given number using a for loop.

Code:-

i=1

while i<=10:

    print(i)

    i+=1

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\16.py"

1

2

3

4

5

6

7

8

9

10

n = int(input("Enter a number: "))

i=1

while i<=10:

    print(n,"X",i,"=",n\*i)

    i+=1

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\17.py"

Enter a number: 5

5 X 1 = 5

5 X 2 = 10

5 X 3 = 15

5 X 4 = 20

5 X 5 = 25

5 X 6 = 30

5 X 7 = 35

5 X 8 = 40

5 X 9 = 45

5 X 10 = 50

18. Write a program to demonstrate the use of break and continue statements in loops.

Code:-

i=1

while i<10:

    if i==5:

        continue

    print(i)

    i+=1

s=0

while s<10:

    if s==5:

        break

    print(s)

    i+=1

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\18.py"

1

2

3

4

19. Print all even numbers from 1 to 50 using a for loop.

Code:-

i=0

for i in range(51):

    if i%2==0:

        print(i)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\19.py"

0

2

4

6

8

10

12

14

16

18

20

22

24

26

28

30

32

34

36

38

40

42

44

46

48

50

20. Write a program to reverse a list using a loop.

Code:-

l = [1,2,3,4,5,6]

print(l)

i=5

l1=[]

while i>=0:

    l1.append(l[i])

    i-=1

print(l1)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\20.py"

[1, 2, 3, 4, 5, 6]

[6, 5, 4, 3, 2, 1]

21. Create a program that demonstrates the use of append(), pop(), and sort() methods in a list.

Code:-

l = [10,2,9,40,5,6,3,1]

l.append(7)

print(l)

l.pop(2)

print(l)

l.sort()

print(l)

l.sort(reverse=True)

print(l)

PS C:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2> python -u "c:\Users\HP\OneDrive\Desktop\SEM-2\PY-Ass\_clg\ASS-2\21.py"

[10, 2, 9, 40, 5, 6, 3, 1, 7]

[10, 2, 40, 5, 6, 3, 1, 7]

[1, 2, 3, 5, 6, 7, 10, 40]

[40, 10, 7, 6, 5, 3, 2, 1]