Computer Science Practical.

—

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Class:- XII-C

Certificate

This is to certify that the ***"Computer Science Project"*** on the Topic ***"Hotel Management"*** has been completed by ***Aman Kushwaha, Divyanshu, and Sangita Chowdhary*** of class XII-C under the guidance of ***Mrs. Ruth Jeba*** in particular fulfillment of the curriculum of ***All India Senior School Certificate Examination (AISSCE***) Leading to the award of annual examination of the year ***2022-23.***

Signature of the External examiner

Signature of the Computer teacher

Acknowledgment

I have made efforts in this project. However, it would not have been possible without many individuals' kind support and help.

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I would also like to thank my parents for their continuous support and encouragement.

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Python: -

❖ Write a simple program explaining stack: -

third.py - D:\classXII\Twenpy\third.py (3.9.4)

File Edit Format Run Options Window Help

```
# program to demonstrate stack implementation using list


stack = [] #LIFO (Last In/First Out) concept

# append() function to push
# element in the stack
stack.append('x')
stack.append('y')
stack.append('z')

print('Initial stack')
print(stack)

# pop() function to pop
# element from stack in
# LIFO order
print('\nElements popped out from stack:')
print(stack.pop())
print(stack.pop())
print(stack.pop())

print('\nStack after elements are popped:')
print(stack)
# print(stack.pop())

# Uncommenting print(stack.pop()) at line 25 will cause an IndexError
# as the stack is now empty
```

Ln: 5 Col: 1

➢ Output:-

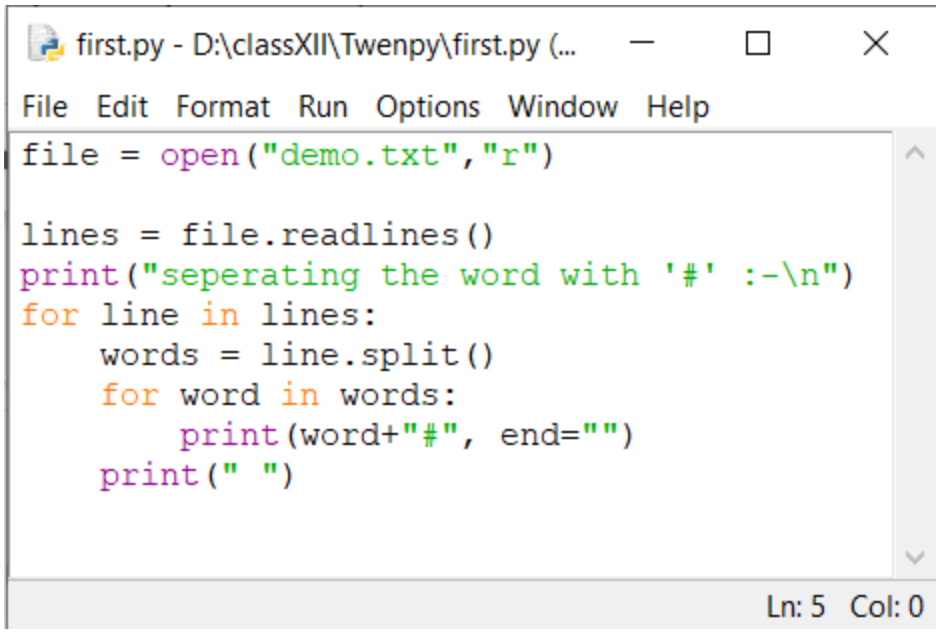
IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

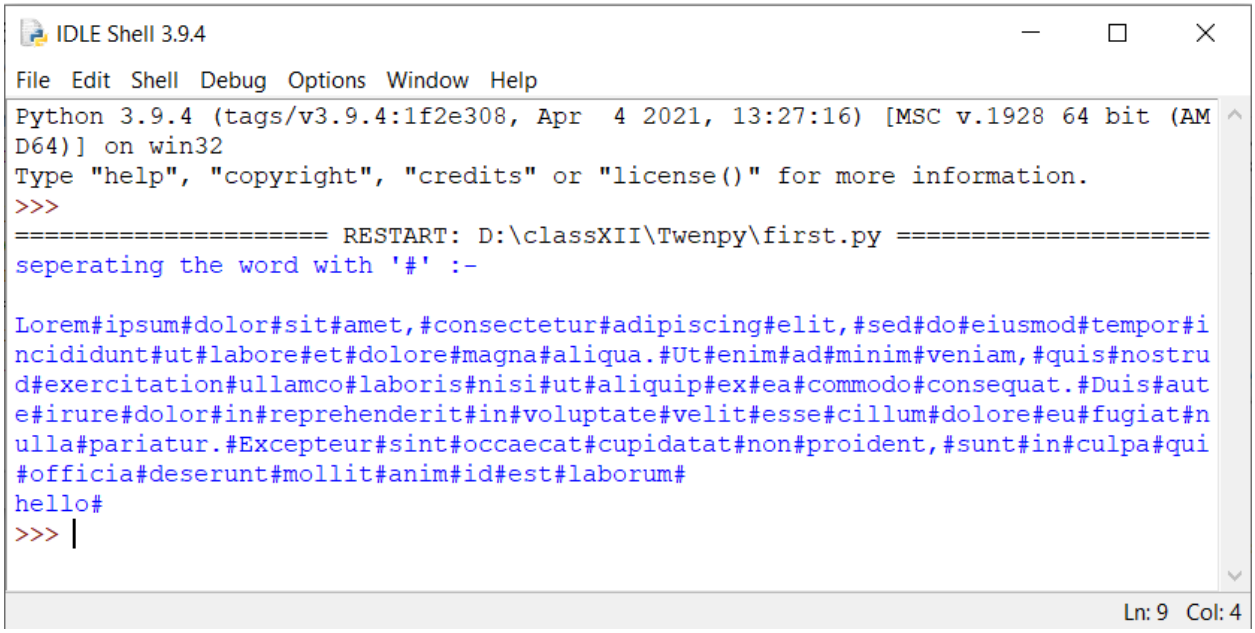
```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16)
[MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for mor
e information.
>>>
========== RESTART: D:\classXII\Twenpy\third.py
 ==========
Initial stack
['x', 'y', 'z']

Elements popped out from stack:
z
y
x

Stack after elements are popped:
[]
>>>
```

Ln: 13 Col: 28

❖ Write a program to read a text file line by line and display each word separated by #: -



➢ Output: -



❖ Write a program to read a text file and display the number of vowels, consonants, upper and lower case letters:

second.py - D:\classXII\Twenpy\second.py (3.9.4)

File Edit Format Run Options Window Help

```
file = open("demo.txt", "r")
reading=file.read()
vowel = 0
constent = 0
lower_case = 0
upper_case = 0
v_letter = ['a','e','i','o','u']
for i in reading:
    if(i in v_letter):
        vowel += 1
    elif(i.isupper()):
        upper_case += 1
    elif(i.islower()):
        lower_case += 1
    else:
        constent += 1
file.close()
print("Content Of The File:-\n")
print(reading, end='\n')
print(f"Number of vowels in the text file: {vowel}")
print(f"Number of constent in the text file: {constent}")
print(f"Number of upper case letters in the text file: {upper_case}")
print(f"Number of lower case letters in the text file: {lower_case}")
```

Ln: 1 Col: 0

➢ Output:-

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\second.py ==========
Content Of The File:-

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor i
ncididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostru
d exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aut
e irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat n
ulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui
 officia deserunt mollit anim id est laborum

Number of vowels in the text file: 165
Number of constent in the text file: 76
Number of upper case letters in the text file: 4
Number of lower case letters in the text file: 200
>>>
```

Ln: 13 Col: 4

❖ Write a program to read and print a file, line by line:-

fourth.py - D:\classXII\Twenpy\fourth.py (3.9.4)

File Edit Format Run Options Window Help

```
f = open("demo.txt", "r")
read = f.readlines()

count = 1
print("Printing every line of the file :-\n")
for line in read:
    print(f"Line {count}: {line.strip()}")
    count +=1
```

Ln: 1 Col: 0

➢ Output:-

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\fourth.py ==========
Printing every line of the file :-

Line 1: Lorem ipsum dolor sit amet,
Line 2: consectetur adipiscing elit,
Line 3: sed do eiusmod tempor incididunt ut
Line 4: labore et dolore magna aliqua.
Line 5: Ut enim ad minim veniam,
Line 6: quis nostrud exercitation
Line 7: ullamco laboris nisi ut aliquip
Line 8: ex ea commodo consequat.
Line 9: Duis aute irure dolor in reprehenderit
Line 10: in voluptate velit esse cillum dolore eu
Line 11: fugiat nulla pariatur. Excepteur sint occaecat
Line 12: cupidatat non proident, sunt in culpa qui
Line 13: officia deserunt mollit anim id est laborum
>>>
```

Ln: 20 Col: 4

❖ Write a program to display data fetched from SQL database:-

five .py - D:\classXII\Twenpy\five .py (3.9.4)

File Edit Format Run Options Window Help

```
import mysql.connector as msqlconnector
import random
import time


msqlconnect = msqlconnector.connect(host='sql12.freemysqlhosting.net',
                                    user='sql12578350',
                                    passwd='84xPRyu3EQ', database='sql12578350')
cur = msqlconnect.cursor()

def main():
    cur.execute("select * from checkin")
    d = cur.fetchall()
    tabl = []
    for r in d:
        tabl.append(r)
    # print(tabl)
    print("cid \t\tname\t\tphoneno \tverification\t  checkin \t checkout")
    for ele1,ele2,ele3,ele4,ele5,ele6 in tabl:
        print("{:<14}|\t{:<11}|  {:<16}|\t\t{:<4}\t| {}  | {}".format(ele1,ele2,ele3,ele4,ele5,ele6))


while True:
    if msqlconnect.is_connected():
        print("Connecting To The Service....")
        time.sleep(2)
        print("Connection Establish")
        main()
        break
    else:
        print("Unable to establish connection. \nExiting.....")
    break
```

Ln: 8 Col: 57

➢ Output:-

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\five .py ==========
Connecting To The Service....
Connection Establish
cid             name            phoneno         verification      checkin         checkout
41977145      | kamlesh     |  2147483647      |         1       | 2022-11-12  | 2022-11-15
210938692     | shub        |  7847829987      |         0       | 2022-11-15  | 2022-11-19
678843316     | dinesh      |  9873356177      |         0       | 2022-11-02  | 2022-11-10
721009572     | kumar       |  1223456689      |         1       | 2022-11-07  | 2022-11-10
828173746     | Rudra       |  8060737409      |         0       | 2022-03-01  | 2022-03-10
940208826     | prash       |  3472103326      |         1       | 2022-10-25  | 2022-10-29
>>>
```

Ln: 14 Col: 4

❖ Write a program to add data to the SQL database:-

six.py - D:\classXII\Twenpy\six.py (3.9.4)

File Edit Format Run Options Window Help

```
import mysql.connector as msqlconnector
import random
import time


msqlconnect = msqlconnector.connect(host='sql12.freemysqlhosting.net',
                                    user='sql12578350', passwd='84xPRyu3EQ', database='sql12578350')
cur = msqlconnect.cursor()

def main():
    cid = random.randint(100, 999999999)
    name = input("Enter the name of the customer: ")
    phoneno = random.randint(1000000000, 9999999999)
    verification = int(input(
        "Enter 0 if customer does not provide any verification document else enter 1: "))
    checkin = input("Enter the checkin in YYYY-MM-DD format: ")
    checkout = input("Enter the checkin in YYYY-MM-DD format: ")
    cur.execute(
        f'''INSERT INTO `checkin` (`cid`, `name`, `phoneno`, `verification`, `checkindate`, `checkoutdate`) VALUES ('{cid}',
'{name}', '{phoneno}', '{verification}', '{checkin}', '{checkout}');''')
    msqlconnect.commit()

while True:
    if msqlconnect.is_connected():
        print("Connecting To The Service....")
        time.sleep(2)
        print("Connection Establish")
        main()
        break
    else:
        print("Unable to establish connection. \nExiting.....")
    break
```

Ln: 7 Col: 36

➢ Output:-

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\six.py ==========
Connecting To The Service....
Connection Establish
Enter the name of the customer: Nath
Enter 0 if customer does not provide any verification document else enter 1: 0
Enter the checkin in YYYY-MM-DD format: 2022-02-14
Enter the checkin in YYYY-MM-DD format: 2022-02-15
>>>
```

Ln: 11 Col: 4

❖ Write a program to delete a row from the SQL database table:

seven sql.py - D:\classXII\Twenpy\seven sql.py (3.9.4)

File Edit Format Run Options Window Help

```
import mysql.connector as msqlconnector
import random
import time


msqlconnect = msqlconnector.connect(host='sql12.freemysqlhosting.net',
                                    user='sql12578350',
                                    passwd='84xPRyu3EQ', database='sql12578350')
cur = msqlconnect.cursor()


def main():
    print("Which customer data you want delete: ")
    cid = int(input("Enter The Respective 'cid': "))
    x = cur.execute(f"select * from checkin where cid={cid}")
    d = cur.fetchall()
    tabl = []
    print("Deleted the following details:-")
    for r in d:
        tabl.append(r)
    # print(tabl)
    print("cid \t\tname\t\tphoneno \tverification\t  checkin \t checkout")
    for ele1, ele2, ele3, ele4, ele5, ele6 in tabl:
        print("{:<14}|\t{:<11}|  {:<16}|\t\t{:<4}\t| {}  | {}".format(
            ele1, ele2, ele3, ele4, ele5, ele6))
    cur.execute(f"delete from checkin where cid={cid}")
    msqlconnect.commit()


while True:
    if msqlconnect.is_connected():
        print("Connecting To The Service....")
        time.sleep(2)
        print("Connection Establish")
        main()
        break
    else:
        print("Unable to establish connection. \nExiting.....")
    break
```

Ln: 1 Col: 0

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\seven sql.py ==========
Connecting To The Service....
Connection Establish
Which customer data you want delete:
Enter The Respective 'cid': 210938692
Deleted the following details:-
cid             name            phoneno         verification      checkin        checkout
210938692     | shub       |  7847829987      |         0       | 2022-11-15  | 2022-11-19
>>>
```

Ln: 12 Col: 4

❖ Write a program to update a SQL database table:

Eight_sql_up.py - D:\classXII\Twenpy\Eight_sql_up.py (3.9.4)

File Edit Format Run Options Window Help

```
import mysql.connector as msqlconnector
import random
import time
msqlconnect = msqlconnector.connect(host='sql12.freemysqlhosting.net',
                                    user='sql12578350',
                                    passwd='84xPRyu3EQ', database='sql12578350')
cur = msqlconnect.cursor()
def main():
    print('''What you want to update:
    1. Phone Number
    2. Verification.
    3. Checkindate
    4. Checkoutdate''')
    d = int(input("Enter the number: "))
    l = ['phoneno', 'verification', 'checkindate', 'checkoutdate']
    cid = int(input("Enter The Respective 'cid': "))
    update = input("Enter The Value: ")
    if d == 1 or d == 3 or d == 4:
        cur.execute(f"update checkin set {l[d-1]}={update} where cid={cid}")
        msqlconnect.commit()
    elif d == 2:
        cur.execute(
            f"update checkin set {l[d-1]}={int(update)} where cid={cid}")
        msqlconnect.commit()
    x = cur.execute(f"select * from checkin where cid={cid}")
    d = cur.fetchall()
    tabl = []
    print("Updated the following details:-")
    for r in d:
        tabl.append(r)
    # print(tabl)
    print("cid \t\tname\t\tphoneno \tverification\t  checkin \t checkout")
    for ele1, ele2, ele3, ele4, ele5, ele6 in tabl:
        print("{:<14}|\t{:<11}|  {:<16}|\t\t{:<4}\t| {}  | {}".format(
            ele1, ele2, ele3, ele4, ele5, ele6))
while True:
    if msqlconnect.is_connected():
        print("Connecting To The Service....")
        time.sleep(2)
        print("Connection Establish")
        main()
        break
    else:
        print("Unable to establish connection. \nExiting.....")
    break
```

Ln: 35 Col: 48

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
================== RESTART: D:\classXII\Twenpy\Eight_sql_up.py ==================
Connecting To The Service....
Connection Establish
What you want to update:
    1. Phone Number
    2. Verification.
    3. Checkindate
    4. Checkoutdate
Enter the number: 1
Enter The Respective 'cid': 721009572
Enter The Value: 8900102891
Updated the following details:-
cid             name            phoneno         verification      checkin        checkout
721009572     | kumar      |  8900102891      |         1       | 2022-11-07  | 2022-11-10
>>>
```

Ln: 18 Col: 4

❖ Write a program to encrypt/decrypt a message:

nine.py - D:\classXII\Twenpy\nine.py (3.9.4)

File Edit Format Run Options Window Help

```
real_message=input('Enter the message to be encoded: ')
j=int(input("Input a random integer:"))
secret_message=[]
print(f"Encryted message: ", end="")
for i in real_message:
    s = ord(i) + j
    secret_message.append(s)
    print(s, end=" ")
# Decrypting the secret_message
revealed_message=""
for i in secret_message:
    s=str(chr(i-j))
    revealed_message += s
print(f"\nDecrypted message: {revealed_message}")
```

Ln: 14 Col: 31

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\nine.py ==========
Enter the message to be encoded: Hello there
Input a random integer:34
Encryted message: 106 135 142 142 145 66 150 138 135 148 135
Decrypted message: Hello there
>>>
```

Ln: 9 Col: 4

❖ Write program to print the fibonacci sequence:

eleven.py - D:\classXII\Twenpy\eleven.py (3.9.4)

File Edit Format Run Options Window Help

```
# Program to display the Fibonacci sequence up to n-th term

nterms = int(input("How many terms? "))

# first two terms
n1, n2 = 0, 1
count = 0

# check if the number of terms is valid
if nterms <= 0:
   print("Please enter a positive integer")
# if there is only one term, return n1
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
# generate fibonacci sequence
else:
   print("Fibonacci sequence:")
   while count < nterms:
       print(n1)
       nth = n1 + n2
       # update values
       n1 = n2
       n2 = nth
       count += 1
```

Ln: 1 Col: 0

➢ Output

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\eleven.py ==========
How many terms? 10
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
34
>>>
```

Ln: 17 Col: 4

❖Write a program to Check Armstrong Number:

twelfth.py - D:\classXII\Twenpy\twelfth.py ...

File Edit Format Run Options Window Help

```
num = int(input("Enter a number: "))
sum = 0
temp = num
while temp > 0:
   digit = temp % 10
   sum += digit ** 3
   temp //= 10

if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong number")
```

Ln: 1 Col: 0

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\twelfth.py ==========
Enter a number: 30
30 is not an Armstrong number
>>>
```

Ln: 7 Col: 4

❖Write convert Dec to Binary and Ocat to Hexa: -

thirteen.py - D:\classXII\Twenpy\thirteen.py (3.9.4)

File Edit Format Run Options Window Help

```
dec = int(input("Enter an integer: "))

print("The decimal value of", dec, "is:")
print(bin(dec), "in binary.")
print(oct(dec), "in octal.")
print(hex(dec), "in hexadecimal.")
```

Ln: 1 Col: 0

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\thirteen.py ==========
Enter an integer: 6874
The decimal value of 6874 is:
0b1101011011010 in binary.
0o15332 in octal.
0x1ada in hexadecimal.
>>>
```

Ln: 10 Col: 4

❖ Make a simple calculator using python: -

tenth.py - D:\classXII\Twenpy\tenth.py (3.9.4)

File Edit Format Run Options Window Help

```
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
sign = ['+','-','*','/']
while True:
    choice = int(input("Enter choice(1/2/3/4): "))

    if choice in (1, 2, 3, 4):
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))
        print(f"{num1} {{}} {num2} = {{}}".format(sign[choice-1],eval(f"{num1} {sign[choice-1]} {num2}")))

        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
          break

    else:
        print("Invalid Input")
```

Ln: 1 Col: 0

➢ Output:

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\tenth.py ==========
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice(1/2/3/4): 3
Enter first number: 35
Enter second number: 25
35.0 * 25.0 = 875.0
Let's do next calculation? (yes/no): no
>>>
```

Ln: 15 Col: 4

❖ Write a program to find HCF: -

*fourteen.py - D:\classXII\Twenpy\fourteen.py (...

File Edit Format Run Options Window Help

```
def compute_hcf(x, y):
    if x > y:
        smaller = y
    else:
        smaller = x
    for i in range(1, smaller+1):
        if((x % i == 0) and (y % i == 0)):
            hcf = i
    return hcf

num1 = int(input("Enter the Ist number: "))
num2 = int(input("Enter the 2nd number: "))

print("The H.C.F. is", compute_hcf(num1, num2))
```

Ln: 10 Col: 0

➢ Output: -

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\fourteen.py ==========
Enter the Ist number: 25
Enter the 2nd number: 35
The H.C.F. is 5
>>>
```

Ln: 8 Col: 4

❖ Write a program to find LCM: -

fifteen.py - D:\classXII\Twenpy\fifteen.py (3.9.4)

File Edit Format Run Options Window Help

```
def compute_lcm(x, y):
    if x > y:
        greater = x
    else:
        greater = y
    while(True):
        if((greater % x == 0) and (greater % y == 0)):
            lcm = greater
            break
        greater += 1
    return lcm

num1 = int(input("Enter the Ist number: "))
num2 = int(input("Enter the 2nd number: "))

print("The L.C.M. is", compute_lcm(num1, num2))
```

Ln: 1 Col: 0

➢ Output: -

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\fifteen.py ==========
Enter the Ist number: 34
Enter the 2nd number: 64
The L.C.M. is 1088
>>>
```

Ln: 8 Col: 4

❖ Write a program to check whether a string is palindrome or not: -

sixteenth.py - D:\classXII\Twenpy\sixteenth.py (3.9.4)

File Edit Format Run Options Window Help

```
my_str = input("Enter the text: ")

# make it suitable for caseless comparison
my_str = my_str.casefold()

# reverse the string
rev_str = reversed(my_str)

# check if the string is equal to its reverse
if list(my_str) == list(rev_str):
   print("The string is a palindrome.")
else:
   print("The string is not a palindrome.")
```

Ln: 1 Col: 0

➢ Output: -

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\sixteenth.py ==========
Enter the text: abcCBA
The string is a palindrome.
>>>
```

Ln: 7 Col: 4

❖ Write a program to sort words alphabetically: -

seventeen.py - D:\classXII\Twenpy\seventeen.p...

File Edit Format Run Options Window Help

```
my_str = input("Enter the text: ")

words = [word.lower() for word in my_str.split()]

words.sort()

print("The sorted words are:")

for word in words:
   print(word)
```

Ln: 1 Col: 0

➢ Output: -

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\seventeen.py ==========
Enter the text: The sorted words are as follows
The sorted words are:
are
as
follows
sorted
the
words
>>>
```

Ln: 13 Col: 4

❖ Write a program to display pyramid pattern: -

eighteen.py - D:\classXII\Twenpy\eighte...

File Edit Format Run Options Window Help

```
rows = int(input("Enter number of rows: "))

for i in range(rows):
    for j in range(i+1):
        print("* ", end="")
    print("\n")
```

Ln: 1 Col: 0

➢ Output: -

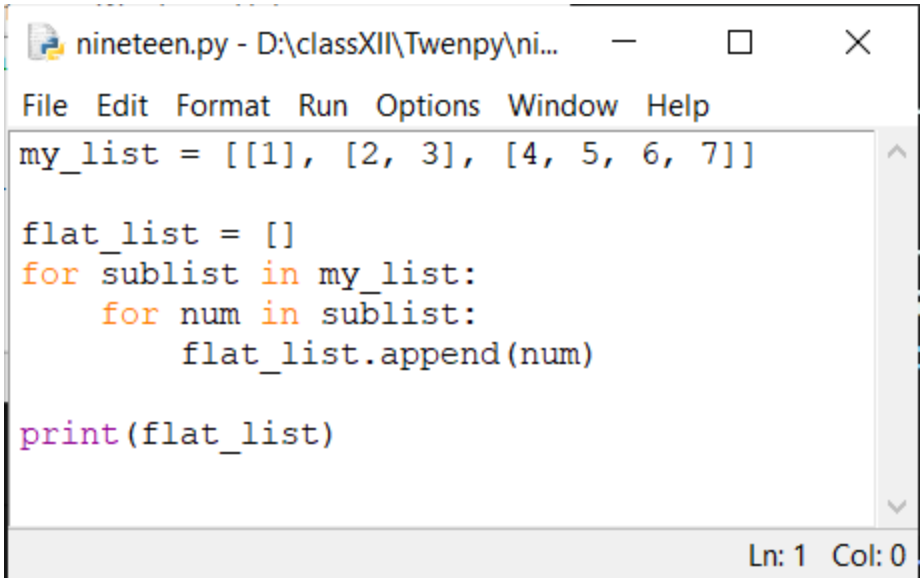
IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

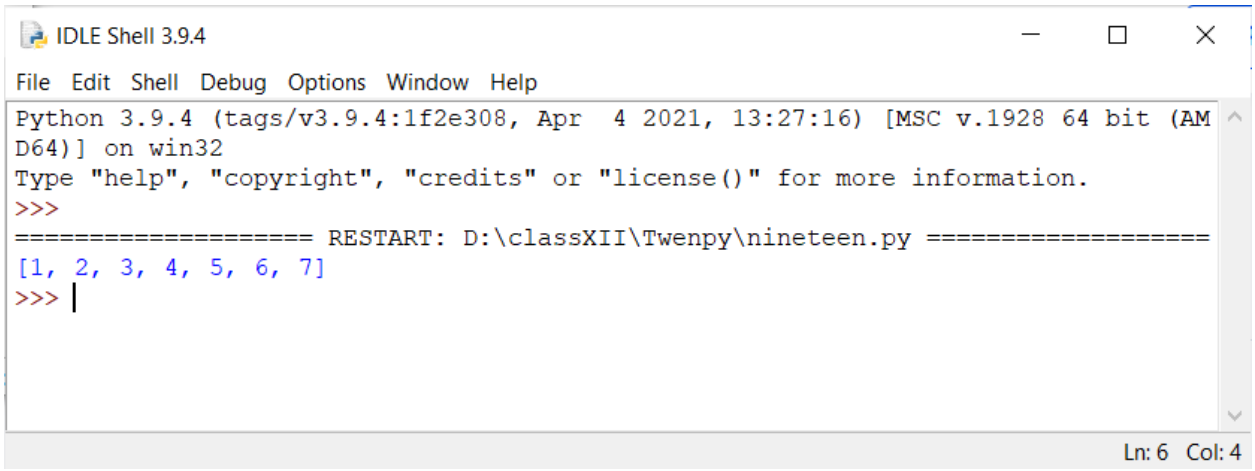
```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\eighteen.py ==========
Enter number of rows: 8
*

* *

* * *

* * * *

* * * * *

* * * * * *

* * * * * * *

* * * * * * * *

>>>
```

Ln: 22 Col: 4

❖ Write program to flatten a nested list: -



➢ Output: -



❖ Write a program to access the index of a list using for loop: -

twenty.py - D:\classXII\Twenp...

File Edit Format Run Options Window Help

```
my_list = [21, 44, 35, 11]

for index in range(len(my_list)):
    value = my_list[index]
    print(index, value)
```

Ln: 1 Col: 0

➢ Output: -

IDLE Shell 3.9.4

File Edit Shell Debug Options Window Help

```
Python 3.9.4 (tags/v3.9.4:1f2e308, Apr  4 2021, 13:27:16) [MSC v.1928 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: D:\classXII\Twenpy\twenty.py ==========
0 21
1 44
2 35
3 11
>>>
```

Ln: 9 Col: 4