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ROLL NO:21023 (CSE-A)

TASK: COGNIZANCE (TASK -4)

1) Write a program to perform addition on two user input numbers.

```
1 # addition on two user input numbers
2 a = int(input('First number : '))
3 b = int(input('Second number : '))
4 sum = a + b
5 print('sum = ', sum)
```

```
1 a = 2
2 b = 3
3 sum = a + b
4 print('sum : ', sum)
```

```
C:\Users\jammi\PycharmProjects\pythonProject4\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject4/main.py
First number : 2
Second number : 3
sum = 5
```

```
C:\Users\jammi\PycharmProjects\pythonProject4\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject4/main.py
First number : 4
Second number : 5
sum = 9
```

```
C:\Users\jammi\PycharmProjects\pythonProject4\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject4/main.py
First number : 10
Second number : 4
sum = 14
```

2) Write a program to accept a string from the user and display characters, that are present at an even index number.

```
1  #displaying characters that are present at an even index number.
2  string = input('Enter the string :')
3  print('Even characters:', string[0::2])
```

```
C:\Users\jammi\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject/main.py
Enter the string :maksha tej
Even characters: mkh e
```

```
C:\Users\jammi\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject/main.py
Enter the string : eswar
Even characters: sa
```

```
C:\Users\jammi\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject/main.py
Enter the string :chintu
Even characters: cit
```

3) Write a python program to make a 2-dimensional list that contains represents a table of records, for instance, student details like Roll no, Student Name, Marks; And complete the following 3 sub-tasks.

Method - 1

```
1  #creating table
2  n=int(input('Enter The Number of Students : '))
3  a=[['Roll No','Name','Marks']]
4  for i in range(n):
5      roll=input('Enter Roll No : ')
6      studentname=input('Enter Student Name : ')
7      marks=int(input('Enter Marks : '))
8      a.append([roll,studentname,marks])
9  for i in range(len(a)):
10     for j in range(len(a[i])):
11         k=a[i][j]
12         print(k,end='\t')
13     print('\n')
14     h=int(input('Enter The Row to be Printed : '))
15     for i in a[h]:
16         print(i,end='\t')
```

i)Add some records in the list and print the list in tabular form,

```
"C:\Users\jammi\PycharmProjects\QUESTION 3\venv\Scripts\python.exe" "C:/Users/jammi/PycharmProjects/QUESTION 3/main.py"
Enter The Number of Students : 3
Enter Roll No : 1
Enter Student Name : Abc
Enter Marks : 90
Enter Roll No : 2
Enter Student Name : Def
Enter Marks : 95
Enter Roll No : 3
Enter Student Name : Ghi
Enter Marks : 85
```

```
C:\Users\jammi\PycharmProjects\pythonProject7\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject7/main.py
Roll No      Name      Marks
1           Abc       90
2           Def       95
3           Ghi       85
```

ii) From the created list, extract and print the second record/row that contains.

```
Enter The Row to be Printed : 2
2      Def 95
```

Method - 2

```
1      a = 'Roll No      Name      Marks'
2      b = '1           Abc       90'
3      c = '2           Def       95'
4      d = '3           Ghi       85'
5      print(a)
6      print(b)
7      print(c)
8      print(d)
```

```
Roll No Name      Marks
1      Abc 90
2      Def 95
3      Ghi 85
```

```
second row is 2           Def           95
```

4) Write a program to check if the given number is a palindrome number.

```

1      #checking the given number is a palindrome number or not
2      n=int(input("Enter number:"))
3      temp=n
4      rev=0
5      while(n>0):
6          num=n%10
7          rev=rev*10+num
8          n=n//10
9      if(temp==rev):
10         print('True')
11     else:
12         print('False')

```

```

C:\Users\jammi\PycharmProjects\pythonProject1\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject1/main.py
Enter number:545
True

```

```

C:\Users\jammi\PycharmProjects\pythonProject1\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject1/main.py
Enter number:433
False

```

5) Print the following pattern.

```

1      #printing pattern
2      print('Enter the rows :')
3      rows = int(input())
4      spaces = rows
5      num = 1
6      for i in range(1, rows + 1, 1):
7          for j in range(1, spaces + 1, 1):
8              print(' ', end='', flush=True)
9          spaces = spaces - 1
10         for q in range(1, i + 1, 1):
11             print('*', end='', flush=True)
12             num = num + 1
13         print(' ', end='', flush=True)
14         print(' ')

```

```

C:\Users\jammi\PycharmProjects\pythonProject3\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject3/main.py
Enter the rows :
5
 *
 * *
 * * *
 * * * *
 * * * * *

```

```
C:\Users\jammi\PycharmProjects\pythonProject3\venv\Scripts\python.exe C:/Users/jammi/PycharmProjects/pythonProject3/main.py
Enter the rows :
8
      *
     * *
    * * *
   * * * *
  * * * * *
 * * * * * *
* * * * * * *
* * * * * * *
* * * * * * *
```