

## Cognizance-Task\_4

### Question 1.

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

Sample Input

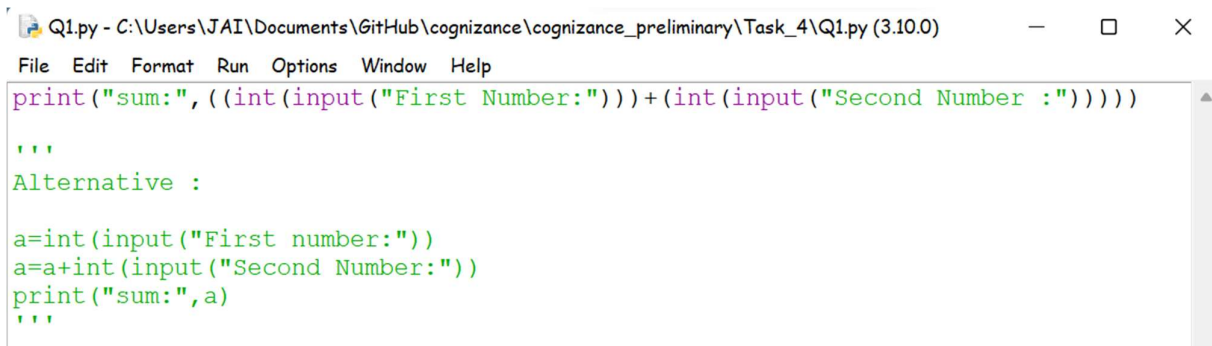
First Number: 2

Second Number: 3

Sample Output

Sum = 5

### Python-code:

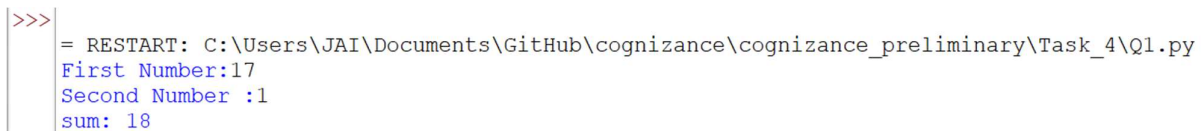


```
Q1.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q1.py (3.10.0)
File Edit Format Run Options Window Help
print("sum:", ((int(input("First Number:")))+(int(input("Second Number :")))))

'''
Alternative :

a=int(input("First number:"))
a=a+int(input("Second Number:"))
print("sum:",a)
'''
```

### Output:



```
>>> = RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q1.py
First Number:17
Second Number :1
sum: 18
```

### Question 2.

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

Sample Input

Enter the string: Lorem Ipsum

Sample Output

LrmIsm

## Python-code:

```
Q2.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q2.py (3.10.0)
File Edit Format Run Options Window Help
s=input("Enter the string:")
p=0
for i in s:
    if (p%2==0):
        print(i,end=" ")
    p=p+1
```

## Output:

```
>>> === RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q2.py ===
Enter the string:Even index only
Ee ne ny
>>>
>>> === RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q2.py ===
Enter the string:Odd isnt
Odin
>>>
```

## Question 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 2 sub-tasks.

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

For e.g.

Roll No	Name	Marks
---------	------	-------

1	Abc	90
---	-----	----

2	Def	95
---	-----	----

3	Ghi	85
---	-----	----

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

For e.g.

2	Def	95.
---	-----	-----

## Python-code:

### 1. Pre-defined records

```
Q3.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q3.py (3.10.0)
File Edit Format Run Options Window Help

rec=[]

#Appending values into the list
rec.append([101, 'Ramesh', 99])
rec.append([102, 'Suresh', 89])
rec.append([103, 'Mukesh', 79])
rec.append([104, 'Rajesh', 69])

#Printing the Records Available in the list
print("Records in the list:")

for i in range(len(rec)):
    for j in range(len(rec[i])):
        print(rec[i][j],end="\t")
    print()

print("\nSecond record in the list:")
#Printing the Second Record from the list
#Alternative: 'print(rec[1])'

for j in range(len(rec[1])):
    print(rec[1][j],end="\t")
```

### 2. User-defined Records

```
*Q3.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q3.py (3.10.0)*
File Edit Format Run Options Window Help

rec=[]

#Appending values into the list
def check():
    choice=input(("Do you want to add one more record?(y/n)"))
    return choice

print("Enter the records seperated by spaces:")
s=input()
rec.append(s.split())
while True:
    choice=check()
    if choice=='y' or choice=='Y':
        s=input()
        rec.append(s.split())
    elif choice=='n' or choice=='N':
        break
    else:
        print("Invalid option")
#Printing the Records Available in the list
print("Records in the list:")

for i in range(len(rec)):
    for j in range(len(rec[i])):
        print(rec[i][j],end="\t")
    print()

print("\nSecond record in the list:")
#Printing the Second Record from the list
#Alternative: 'print(rec[1])'

for j in range(len(rec[1])):
    print(rec[1][j],end="\t")
```

Ln: 5 Col: 0

## Output:

1.

```
>>> == RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q3.py ==  
Records in the list:  
101    Ramesh  99  
102    Suresh  89  
103    Mukesh  79  
104    Rajesh  69  
  
Second record in the list:  
102    Suresh  89
```

2.

```
>>> = RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q3.py  
Enter the records seperated by spaces:  
1 aqss 43  
Do you want to add one more record?(y/n)y  
2 ygfd 76  
Do you want to add one more record?(y/n)t  
Invalid option  
Do you want to add one more record?(y/n)Y  
3 nhgfdf 54  
Do you want to add one more record?(y/n)N  
Records in the list:  
1      aqss      43  
2      ygfd      76  
3      nhgfdf    54  
  
Second record in the list:  
2      ygfd      76  
>>>
```

#### Question 4:

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

Sample Input

Number: 545

Sample output

True

#### Python-code:

```
Q4.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q4.py (3.10.0)
File Edit Format Run Options Window Help
n=int(input("Number:"))
c=n
reversed=0
while c>0:
    temp=int(c%10)
    reversed=reversed*10+temp
    c=int(c/10)
if reversed==n:
    print("true")
else:
    print("false")
```

#### Output:

```
>>> === RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q4.py ===
Number:545
true
>>> === RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q4.py ===
Number:13321
false
>>> === RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q4.py ===
Number:123321
true
```

### Question 5.

Print the following pattern

```
  *
 * *
* * *
* * * *
* * * * *
```

### Python-code:

```
Q5.py - C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q5.py (3.10.0)
File Edit Format Run Options Window Help
s=4
for i in range(5):
    for k in range(s):
        print("",end=" ")
    for j in range(i+1):
        print("* ",end="")
    s=s-1
    print()
```

### Output:

```
>>>
=== RESTART: C:\Users\JAI\Documents\GitHub\cognizance\cognizance_preliminary\Task_4\Q5.py ===
  *
 * *
* * *
* * * *
* * * * *
```