

```
n = input("enter a number : ")
n = int(n)
total = 0
i = 1
while i <= n:
    total += i
    i += 1
print(total)
```

```
enter a number : 25
325
```

```
# problem
# ask user to input a number containing more than one digit
# example - 1256
# calculate 1+2+5+6 and print

# algorithm - (method to solve problem in human language)
# ask input in string, i.e don't change string to int
# example - "1256"
# pick string character one by one and change to int
# int(example[0]) + int(example[1]) ... go upto len(example) - 1
```

```
# solution of this question
```

```
number = input("enter a number ")
# "1256" # length = 4 , last index = 3
# int(number[i]) +
```

```
total = 0
i = 0
while i < len(number):
    total += int(number[i])
    i += 1
print(total)
```

```
enter a number 11111
5
```

```
# ask a user for name
# Example - Akshay Verma
# print count of each words
# output :
# A : 1
```

```
# k : 1
# s : 1
# h : 1
# a : 2
# y : 1
# V : 1
# e : 1
# r : 1
# m : 1
```

solution of this question is

```
name = input("please enter your name ")
# Akshay Verma
# name.count("A") , name.count(name[0]) = 1
# name.count("k") , name.count(name[1]) = 1
# name.count("s") , name.count(name[2]) = 1
# name.count("h") , name.count(name[3]) = 1
# name.count("a") , name.count(name[4]) = 2
# name.count("y") , name.count(name[5]) = 1
# name.count("V") , name.count(name[6]) = 1
# name.count("e") , name.count(name[7]) = 1
# name.count("r") , name.count(name[8]) = 1
# name.count("m") , name.count(name[9]) = 1
```

```
# output
# A : 1
# k : 1
# s : 1
# h : 1
# a : 2
# y : 1
# v : 1
# e : 1
# r : 1
# m : 1
```

```
temp_var = ""
i = 0
while i < len(name):
    if name[i] not in temp_var:
        temp_var += name[i]
        print(f"{name[i]} : {name.count(name[i])}")
    i += 1
```

```
please enter your name Akshay Verma
A : 1
k : 1
```

```
s : 1
h : 1
a : 2
y : 1
  : 1
V : 1
e : 1
r : 1
m : 1
```

```
# Infinite loop
i = 0
while i <= 10:
    print("Hello world ")
```

[illegible]

Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world
Hello	world

```
# Infinite loop
i = 0
while i <= 10:
    print("Hello world")
    i += 1  #( it is used to stop the Infinite loop)
```

[illegible]

```
# for loop with range function
```

```
for i in range(10):  
    print("Hello world")
```

[illegible]