Day #2

a) Given a string "Rahul" we have to print the substrings

Input output basics

String concatenation => adding 2 strings

```
a = "1" + "2"
print(a)
```
Output:
```
12
```

```
a = "Hello" + " " + "world"
print(a)
```
Output
```
Hello world.
```

```
Username = "Ravi"
print("Hi" + username)
```
Output
```
Hi Ravi.
```

```
a = "*" + 10
print (a)
```

output

TypeError: can only concatenate str
(not "int") to str

***
we can only concatinate the string but
not the string with other datatype

String Repetition.

```
a = "*" * 5
print (a)
```

output

*****

```
S = "python"
a = ("*" * 4) + S + ("*" * 4.)

print (a)
```

output

* * * * Python * * * *

length of String

len() returns number of characters in a given. String

```
Username = "Ravi"
length = len(username)
print (length.)
```

Output

4.

```
Username = "CHIVUKAMARI VENKATESH)
length = len(username.)
print (length)
```

Output

21.

Taking input from the user.

input()

ex/ syntax : username = input()

Ex:

username = input()

length = len(username)

print(length)

Accessing characters in a string

RAVI
0 1 2 3

→ So. above shown numbers are called as index number

→ This numbers always begin with 0.

Q.?

```
username   =   "Ravi"

print (username [0].)
```

Error

Index is out of range.

```
a = "Python

print (a)
```

output:

Syntax Error: EOL while scanning string literal

How to Debug a code.

what is Debugging?

Debugging is the process of working through code step by step to find and correct errors

Debug to make code error Free.

Software developers around the world often uses debugging tools to solve the errors/bugs in the code.

Type conversions

Obtain a part of String

ls obtaining a part of a string is called as string slicing

Slicing Syntax.

variable_name [start _index : end _index]

That means

message

Hi Ravi
0 1 2 3 4 5 6

message [3:6]

" Rav."

end_index is not included

message [3:7]

" Ravi "

→ This means we are printing only
upto 6.

message [3:] → If the end index is
not specified, slicing
" Ravi." stops at the end
of the string

message [:2] → If the start index is
not specified, slicing
" Hi " starts from the
index 0

message [s] → if the start and end
                    index are not specified,
"Hi Ravi"   the sliced string is
                    same as the original
                    string

Adding Twonumbers

```
a = input()
b = input()

c = a+b

print(c)
```

input
2
3
output
23

we need "5" as output so,23 for

check data Type.

variable or value.

type (↑)

gives the data type.

print (type (10))

< class "int" >

Change Data Type

Type Conversion

Converting the value of one data type to another Data type.

$$string \longleftrightarrow integer$$

$$integer \longleftrightarrow float$$

a = "8"

a = int (a) ⇒ int () converts valid data of any type to integer

a = "Five"

a = int (a)

print (type(a))

Output

Value Error:

invalid literal for int () with base 10: 'Five'

a = "5.0"

a = int(a)

print (type(a))

output:

ValueError:

Adding two Numbers

a = input ()

a = int(a)

b = input ()

b = int (b)

result = a + b

print ("sum :" + str (result))

// print ("sum :" + result) # Error

((Type error :

out put

5

input

2

3

Type conversions

int() ——> change to integer

float() ——> change to float

str() ——> change to string

bool() ——> change to boolean

Program

given a word and a number (N) write a program to print the last three characters of the word N times in a single line.

```
a = input()
b = int(input())
c = len(a)
d = c-3
e = a[d:]
print(e * b)
```

write a program that prints the sum of the digits of a given three digit number.

```
a = input()
b = int(a[0]) + int(a[1]) + int(a[2])

print(b)
```

<u>Output</u>

323
8.