# DAY-1 MORNING ASSESSMENT

# VARIABLES BASICS

1.What is a variable in python?

A variable is a container used to store values.

2.How can you declare a variable in python?

We can simply assign a value to name.

3.Can you change the value of the variable after declaring it?

Yes.

4.Does python require declaring the variable type?

No

5.What will happen if you use a variable before assigning a variable to it?

It will return name error

6.is python case sensitive?

Yes

7.Can a variable name start with number?

No

8.What are the symbols allowed apart from letters and numbers?

Underscore\_

9.is my\_var the same as My\_Var in python?

Not same

10.difference between assignment = and equality == in python?

Assignment operator = is used to assign values where as == is check whether two variables are equal or not ,it returns Boolean value( T/F) as result.

# VARIABLES -Data Types and Examples

1.how do you assign an integer value to a variable?

By simply assigning the integer value is that number to the variable

2. how do you assign a floating-point value to a variable?

By simply assigning the decimal value is that number to the variable

3. how do you assign a string value to a variable?

By using single or double quotes.

4.What is the type of variable x=True

Boolean

5.How do you check the type of variable?

By using type() function

6.Can a variable change its type after assignment?

Type conversion we can change

7.What will be the type of x=3+4.5?

Float

8.Give an example of assigning multiple variables in one line

Apple=mango=goa=”fruits”

9.What is dynamic typing in python?

We don’t need to declare data type in python it automatically knows at the rumtime

10.what will happen if you assign x=”5” and then do x=x+2?

We cannot concatenate string to integer

# Strings-Basics

1.How do you define a string in python?

Anything that is enclosed in “ “ or ‘ ‘ is known as string.

2. What is the difference between single and double quotes in strings?

Both are same used for string literals

3. How do you create a multi-line string?

By using escape character \n when we want get into a new line.

4.How do you find the length of a string?

By using len() function

5.How do you access the first character of a string?

by indexing we can use first character of a string

example: a=”apple”

print(a[0])

returns the first character a.

6. What is string slicing?

String slicing is accessing the string from a certain length to certain range or getting the substrings.

7.What does my\_str[0:3] return if my\_str = "Python" ?

It returns the string from 0 index to 2nd index of the string.

8.How do you concatenate two strings?

By adding the two string using + operator

9.What is the result of "Hello" \* 3 ?

It returns “Hello” three times.

HelloHelloHello

10.Are strings mutable or immutable in Python? How do you define a string in Python?

Strings are immutable. Anything that is enclosed in “ “ double quotes or ‘ ‘ is known as string

# Type Casting- Basics

1.What is type casting in Python?

Type casting is the process of converting the variables from one data type to another data type.

2.How do you convert a string "123" to an integer?

int(“123”)🡪 converts the string to integer

3.How do you convert a float 3.5 to an integer?

int(3.5)🡪converts the float to integer.

4. How do you convert an integer 5 to a string?

str(5)

5. What happens if you try to convert a string “abc” to an integer?

It gives Value error.

6. How do you convert a string "3.14" to a float?

float(“3.14”)

7.What will be the result of int(3.99)?

3 three is

8.how do you check if a variable can be converted to a number safely?

We can use try except block

Try:

int(“abc“)

Except ValueError:

Print(“cannot be converted”)

9.What is the difference between str() and repr() in python?

Both str() and repr() are used for string objects but has different purpose.

10.How do you convert Boolean True to an integer?

By using int() function we can convert to Boolean

True converts to 1

False converts to 0