# Data Types and In-Built Functions

# String and its functions

"""

-6 -5 -4 -3 -2 -1

p y t h o n

0 1 2 3 4 5

"""

f\_name = "python"

"""# first character"""

#print(f\_name[0])

"""# last character"""

# print(f\_name[-1])

"""# slicing operation from 2nd to 5th character [start\_index : end\_index ]"""

# print(f\_name[1:5])

# print(f\_name[1:6])

# print(f\_name[1:len(f\_name)])

# print(f\_name[1:-2])

"""# what if I access an index which is not there in string?"""

# print(f\_name[7]) # IndexError: string index out of range

# print(f\_name[2.1]) # TypeError: string indices must be integers

"""# change or delete a string"""

language\_name = "python3"

# language\_name[-1] = "3.7" # TypeError: 'str' object does not support item assignment because strings are immutable

"""# can I delete a character from string? -- No"""

# del language\_name[-1] # TypeError: 'str' object doesn't support item deletion

"""delete a string variable """

# del language\_name # this will delete the variable in memory

# print(language\_name) # NameError: name 'language\_name' is not defined

""" operations on strings """

# first\_language = "Hello"

# recent\_language = "World!"

"""1. Concatenation(addition) of two strings"""

# print(first\_language + " " + recent\_language)

""" \* on string """

# print((first\_language + " ") \* 3)

#

# welcome = 'hello''world!'

# print(welcome) # o/p helloworld!

""" Iterate Strings"""

# message = "hello students"

# count = 0

# for char in message:

# if char == "o":

# count += 1

#

# print("No of time o getting repeated in string " + message + "are " + str(count))

"""Membership test"""

# message = "hello students"

# to\_be\_find = 'x'

# count = 0

# is\_found = False

# for char in message:

# if char == to\_be\_find:

# is\_found = True

# break

# print(is\_found)

""" builtin functions : len() and enumerate()"""

# epic = "mahabharat"

#

# print("length of strings is ", len(epic)) # this counts the characters in the strings

#

# print(list(enumerate(epic)))

#

# for index, value in enumerate(epic):

# print("(" + str(index) + "," + value + ")", end=" ")

""" escape sequence """

# print("what's your date of birth")

#

# # print("I said, "what's the DOB?"") ----------> problem

#

# print("""I said, "what's the DOB?""") # solution 1

#

# print("I said, \"what's the DOB?\" ") # solution 2

""" formatting the strings """

student\_f\_name = ["All Talks", "Ikram", "Sanket", "Sapna", "Pratik"]

student\_l\_name = ["abc", "bac", "cab", "xyz", "asd"]

# english\_stmt = "Hello {}, are you liking python?".format(student\_name[0])

#

# for i in range(len(student\_f\_name)):

# print("Hello {} {}, are you liking python?".format(student\_f\_name[i], student\_l\_name[i]))

# for i in range(len(student\_f\_name)):

# print("Hello {0} {2} {3}, are you liking python?".format(student\_f\_name[i], student\_l\_name[i], "m\_name"))

# # index in {} can be interchanged

# for i in range(len(student\_f\_name)):

# print(f"Hello {student\_f\_name[i]} {student\_l\_name[i]}, are you liking python?")

"""command string methods """

name = "Nikhil"

stmt\_1 = "Suhas is able to undertand lec in Itvedant"

stmt\_2 = "Ajay,is,able,to,undertand,lec,in,Itvedant"

# lower()

# print(name.lower())

# upper()

# print(name.upper())

# split()

# print(stmt\_1.split())

# print(stmt\_2.split(","))

# replace()

# news = "Happy new year!"

# print(news.replace("Happy", "Very Happy"))

"""

Assignment: 1

Problem statement: Remove all the char apart from integers in given string

var = "I am 10 year and 1 month old"

o/p 101

Hint : isdigit()

Assignment: 2

Problem statement: Display words which has numbers in it.

var = "Janhavi20 is python3 engineer"

o/p : Janhavi20 python3

Hint: isalpha()

"""

value = "1"

print(value.isdigit())