Hands On – Python

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**Day 6 – 11/11/2024 (Monday)**

1. **appendcsv.py**

🡪 import csv

new\_data = [

    ["Harinya", 32, "Andhra Pradesh"],

    ["Vikas", 21, "Kurnool"]

]

# File path to the CSV file

file\_path = "C:/Users/Sarthak Kulkarni/Desktop/Hexaware Python Training/Data\_engineering/Day6/example.csv"

# Open the file in append mode and write the new rows

with open(file\_path, mode="a", newline="") as file:

    writer = csv.writer(file)

    # Write each row in new\_data

    for row in new\_data:

        writer.writerow(row)

print("Data appended successfully.")

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1. **controlstr.py**

🡪 # if statement

x = 10

if x > 5:

    print("x is greater than 5")

# If else statement

x = 3

if x > 5:

    print("x is greater than 5")

else:

    print("x is not greater than 5")

# IF-elif-else statement

x = 5

if x > 10:

    print("x is greater than 10")

elif x > 5:

    print("x is greater than 5")

else:

    print("x is 5 or less than 5")

# For loop

for i in range(3):

    print("Loop iteration:", i)

# While loop

count = 0

while count < 3:

    print("Count is:", count)

    count += 1

# Nested Loop

for i in range(2):

    for j in range(3):

        print(f"i: {i}, j: {j}")

# Break, Continue and Pass

for i in range(5):

    if i == 4:

        break  # exits loop if i is 4

    elif i == 1:

        continue  # skips this iteration if i is 1

    print(i)

# Input & Output

name = input("Enter your name: ")

print("Hello,", name)

# Introduction to Lists

fruits = ["apple", "banana", "cherry"]

print(fruits[0])  # Output: apple

# List, Methods and slicing

fruit = ["apple", "banana", "cherry"]

fruit.append("orange")  # Adds "orange"

print(fruit)

# Introduction to Dictionaries & Dictionary Methods

person = {"name": "Sarthak", "age": 22}

print(person["name"])

# Introduction to Set & Set Methods

fruits = {"apple", "banana", "cherry"}

fruits.add("orange")

print(fruits)

# Introduction to Map & Map Methods

numbers = [1, 2, 3]

squared\_numbers = list(map(lambda x: x\*\*2, numbers))

print(squared\_numbers)

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1. **csvopen.py**

🡪 import csv

import os

# Define the path to the CSV file

file\_path = "C:/Users/Sarthak Kulkarni/Desktop/Hexaware Python Training/Data\_engineering/Python\_codes/example2.csv"

# Check if the file exists before opening it

if os.path.exists(file\_path):

    # Open the file in read mode

    with open(file\_path, mode="r") as file:

        # Create a CSV reader object

        csv\_reader = csv.reader(file)

        # Iterate over each row in the CSV file

        for row in csv\_reader:

            print(row)  # Print each row

else:

    print("The file does not exist.")

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1. **introduction.py**

🡪 # Writing the first program

print("Hello Sarthak!")

# Key words and Identifier

x = 5

if x > 0:

    print("x is positive")

# Variables and Operators

a = 10   # Variable assignment

b = 20

sum\_result = a + b  # Using the '+' operator

print("Sum:", sum\_result)

# Data Types

x = 5           # int

y = 3.14        # float

name = "Python" # str

is\_active = True # bool

# Sequence

my\_list = [1, 2, 3, 4]   # list

print("List: ",my\_list)

my\_tuple = (5, 6, 7)     # tuple

print("Tuple: ",my\_tuple)

for i in range(3):       # range

    print(i)

# Boolean

is\_sunny = True

if is\_sunny:

    print("It's a sunny day!")

else:

    print("It's not sunny.")

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1. **practice1.py**

🡪 import csv

filepath = "example2.csv"

# Open the file in write mode ('w') which overwrites any existing data

with open(filepath, 'w', newline="") as file:

    csvwriter = csv.writer(file)

    # Write header row

    csvwriter.writerow(["Id", "Name", "Age", "Courses\_Enrolled"])

    # Data to write

    data = [

        [1, "Aparna", 20, 3],

        [2, "Stella", 20, 1],

        [3, "Kishore", 21, 4]

    ]

    # Write the data rows

    csvwriter.writerows(data)

print("Writing has been completed")

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1. **practice2.py**

🡪 import csv

filepath = 'example2.csv'

# Open the file in write mode ('w'), which overwrites any existing data

with open(filepath, 'w', newline="") as file:

    csvwriter = csv.writer(file)  # Create a writer object

    # Write header row

    csvwriter.writerow(["Id", "Name", "Age", "Courses\_Enrolled"])

    # Data to write

    data = [

        [6, "arna", 20, 3],

        [5, "ella", 20, 1],

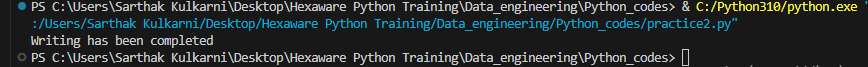
        [4, "shore", 21, 4]

    ]

    # Write the data rows

    csvwriter.writerows(data)

print("Writing has been completed")



1. **practice3.py**

🡪 import csv

filepath = "example2.csv"

# Open the file in read-and-write mode ('r+')

with open(filepath, 'r+', newline="") as file:

    csvwriter = csv.writer(file)

    # Move the file pointer to the end of the file to append data

    file.seek(0, 2)  # Seek to end of file

    # Data to append

    additional\_data = [

        [6, "Liam", 23, 1],

        [7, "Emma", 22, 2]

    ]

    # Append the new data rows

    csvwriter.writerows(additional\_data)

print("Data has been appended successfully.")

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