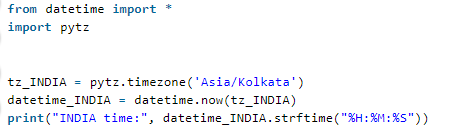
**Week 3 : Lab 1**

**Study the following problems and run their solutions in Python**

**Example 1: Current time of a timezone-Using pytZ module**

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**Example 2 : Current time – Using date time object**

**A computer screen shot of text

Description automatically generated**

**Example 3:**

**A computer code with text

Description automatically generated with medium confidence**

**Example 4 : Write a Python program that calculates the area of a circle based on the radius entered by the user.**

**Sample Output :**

**r = 1.1**

**Area = 3.8013271108436504**

**Area of a Circle: In geometry, the area enclosed by a circle of radius r is πr2. Here the Greek letter π represents a constant, approximately equal to 3.14159, which is equal to the ratio of the circumference of any circle to its diameter.**

**A circle with a number of lines and a number of letters

Description automatically generated with medium confidence**

**A screenshot of a computer code

Description automatically generated**

**Example 5 : Write a Python program that accepts the user's first and last name and prints them in reverse order with a space between them.**

input() function reads a line from sys.stdin and returns it with the trailing newline stripped.

**To assign the user's name to a variable "y" you can use following command :**

**y = input('Input your name: ')**

**A screenshot of a computer code

Description automatically generated**

**Sample Output**

**A white background with black text

Description automatically generated**

**Example 6: Print first and last name in reverse order with a space between them**

Write a Python program that accepts the user's first and last name and prints them in reverse order with a space between them.

**A screenshot of a computer

Description automatically generated**

**Example 7: Display the first and last colors from a given list**

Write a Python program to display the first and last colors from the following list.

**color\_list = ["Red","Green","White" ,"Black"]**

**A screenshot of a computer

Description automatically generated**

**Example 8: Calendar**

Write a python program that prints that print the Calander for a given month and year.

Note: Use 'calendar' module.

Python calendar.month(theyear, themonth, w=0, l=0):

The function returns a month’s calendar in a multi-line string using the formatmonth() of the TextCalendar class.

'l' specifies the number of lines that each week will use.

**A screenshot of a computer program

Description automatically generated**

**Sample output**

**A white background with numbers and letters

Description automatically generated**

**Example 9: Write a Python function to find the maximum of three numbers.**

**A screenshot of a computer program

Description automatically generated**

**Example 10: Parking Meter**

**Info: This parking meter charges $4 per hour for the first 3 hours and then $2 per hour thereafter.**

**Write a simple program that does the following:**

* **Displays a message on the screen saying: "Kia Ora, this is a parking meter"**
* **Creates and sets the value for variable ParkTime = 4 hours**
* **Creates and sets values for variables: rate and cost**
* **Calculates the parking charges for ParkTime using an If statement**
* **Displays appropriate message showing the calculated charge.**

**A screen shot of a computer program

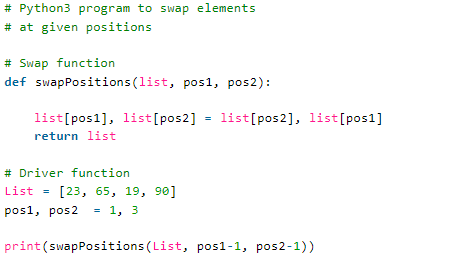
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**Example 11:** **Python Program to Swap Two Elements in a List**

***Input : List = [23, 65, 19, 90], pos1 = 1, pos2 = 3  
Output : [19, 65, 23, 90]***

***Input : List = [1, 2, 3, 4, 5], pos1 = 2, pos2 = 5  
Output : [1, 5, 3, 4, 2]***

**Swap Two Elements in a List using comma assignment**

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