**Institute of Computer Technology**

**B. Tech. Computer Science and Engineering**

**Semester: IV**

**Sub: Functional Programming**

**Course Code: 2CSE403**

**Practical Number:1**

**Objective:**

Q.1: Shyam wants to know age of his grandfather who was born on 5th June,1947. Kindly help Shyam to know how old is his grandfather. Print current date and time and the calendar for the month and year on which Shyam’s grandfather was born.

Q.2: In an online game competition, a registration form has to be filled up by user by input command. Kindly help user to perform following operation while submitting form.

1. User have to submit their detail and a message should be displayed that data is submitted or not.
2. Print the data and submission time.

3. Given a number game one needs to generate any random number; iterate through the all digits present and print the sum of all digits.

Here is a sample run:

Enter a number between 0 and 1000:43

The sum of the digits is 7

**Code :**

import datetime

import calendar

import random

# Task 1: Calculate age and print current date/time and calendar

def task\_1():

birth\_date = datetime.date(1947, 6, 5)

today = datetime.date.today()

age = today.year - birth\_date.year - ((today.month, today.day) < (birth\_date.month, birth\_date.day))

print(f"Shyam's grandfather is {age} years old.")

print(f"Current Date and Time: {datetime.datetime.now()}")

print(f"Calendar for {birth\_date.year}, {birth\_date.month}:\n")

print(calendar.month(birth\_date.year, birth\_date.month))

# Task 2: User registration form

def task\_2():

user\_name = input("Enter your name: ")

email = input("Enter your email: ")

submission\_time = datetime.datetime.now()

print("Data submitted successfully!")

print(f"Name: {user\_name}")

print(f"Email: {email}")

print(f"Submission Time: {submission\_time}")

# Task 3: Random number and sum of its digits

def task\_3():

number = random.randint(0, 1000)

print(f"Generated number: {number}")

digit\_sum = sum(int(digit) for digit in str(number))

print(f"The sum of the digits is {digit\_sum}")

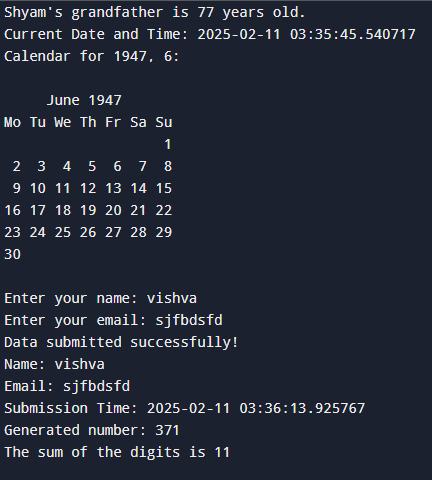
# Run all tasks

task\_1()

task\_2()

task\_3()

**Output :-**

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