



اَوَيْتُ سَيِّدِي تَيْكُونُ لِي مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

UNIVERSITI TEKNOLOGI MARA (UiTM)

CAWANGAN KEDAH, SUNGAI PETANI

COLLEGE OF COMPUTING, INFORMATICS AND MATHEMATICS

**DIPLOMA OF LIBRARY INFORMATICS**

**(CDIM 144)**

PENGATURCARAAN UNTUK PERPUSTAKAAN **(IML208)**

**INDIVIDUAL ASSIGNMENT: ZODIAC SIGN PERSONALITY DETERMINATION**

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WEEK 12



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With this pledge, I am fully aware that I am obliged to conduct myself with utmost honesty and integrity. I fully understand that a disciplinary action can be taken against me if I, in any manner, violate this pledge.

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\*Students are required to sign one pledge for each course taken.

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Sincerely,

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## **1.0 INTRODUCTION**

This interactive Python application, built using the Tkinter library, empowers users to explore the intriguing world of astrology and unveil insights into their personalities based on their zodiac signs. The aesthetically pleasing interface, adorned with twinkling stars, creates a captivating ambiance for users to input their personal information and discover the characteristics associated with their zodiac signs. Through the fusion of programming and astrological concepts, this application delivers an engaging and personalized experience, offering not only zodiac sign insights but also an exploration of personality traits that align with each sign.

The program begins with an interactive GUI where users input their name, gender, and date of birth. As stars twinkle in the background, the application dynamically calculates the user's zodiac sign and corresponding personality traits. The program employs Python's Tkinter for GUI development and incorporates random star generation for a visually appealing backdrop. The logic behind zodiac sign determination, personality profiling, and age calculation enhances the user experience, providing a comprehensive overview of astrological insights. Users can save their information for future reference, making this program a versatile tool for self-discovery and reflection.

Upon entering personal details, users can click the "Calculate" button to instantly receive information about their zodiac sign, associated personality traits, and a breakdown of their age in years, months, and days. The application not only displays the results on the interface but also prints them in the terminal for users to review. With the option to save information and a convenient clear button to reset fields, the program ensures a user-friendly and efficient experience. Dive into the cosmos, explore your zodiac, and unravel the mysteries of your personality with the Zodiac Sign Personality Determination program.

## **1.1 REPORT ON THE PYTHON CODE: ZODIAC: SIGN PERSONALITIES TRAIT PERSONALITY PREPARATION.**

The code utilizes the Tkinter library to create a graphical user interface for determining a person's zodiac sign, personality traits, and age based on their input.

Stars are randomly generated on the canvas, creating a twinkling effect.

User Interface:

Input fields for the user's name, gender, and date of birth (DOB) are provided. Labels and entry widgets are styled with different fonts and colors for better readability.

#### Twinkling Stars:

The `create_star` function randomly generates stars on the canvas, contributing to the aesthetic appeal of the application.

#### Zodiac Sign Determination:

A function `calculate_zodiac_sign` determines the zodiac sign based on the provided date of birth.

#### Personality Determination:

The `determine_personality` function assigns personality traits corresponding to each zodiac sign.

#### Age Calculation:

The `calculate_age` function calculates the age of the user in years, months, and days based on the provided DOB.

#### Calculate Button:

The "Calculate" button triggers the calculation of zodiac sign, personality traits, and age when clicked.

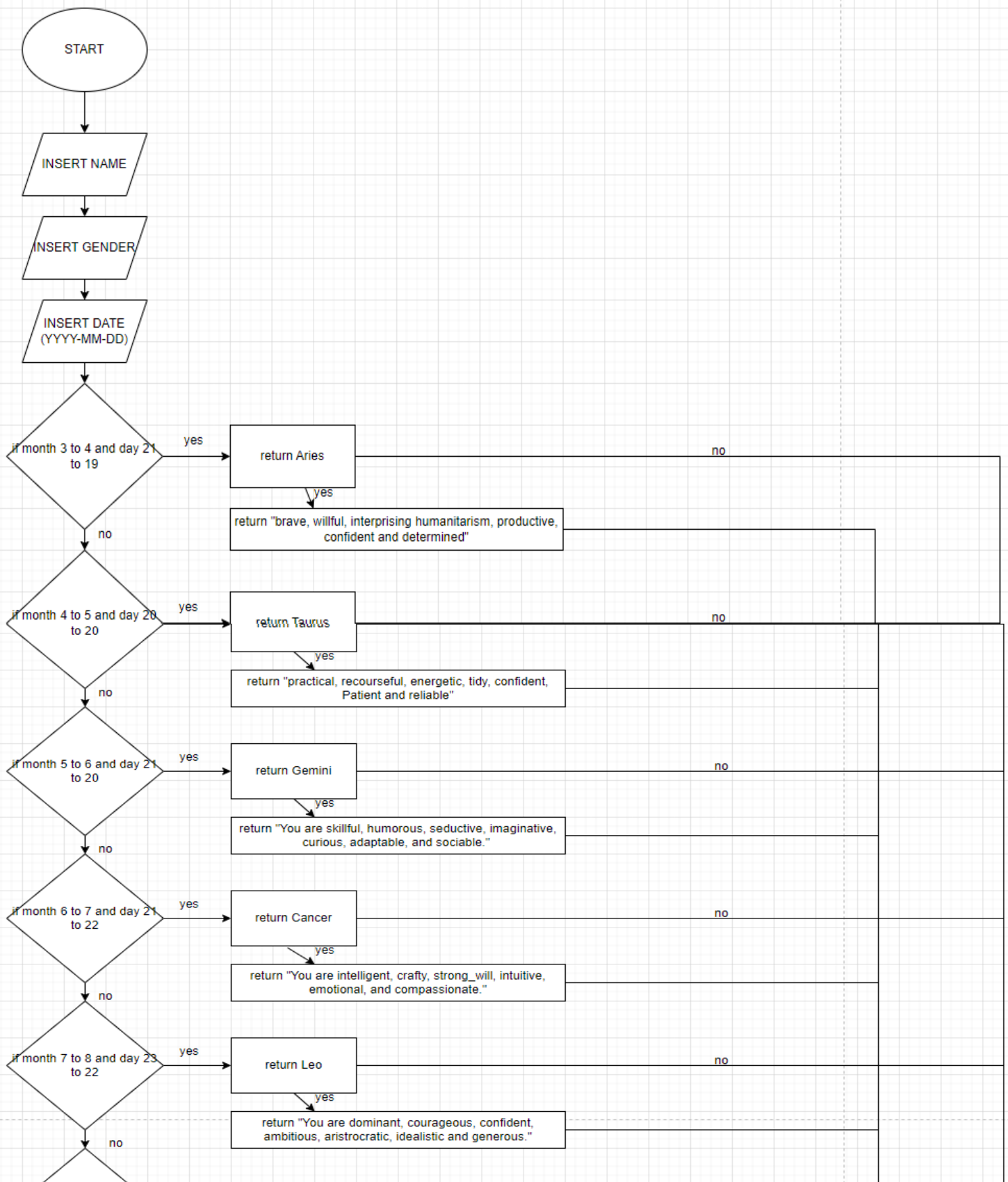
#### Result Display:

The results are displayed on the GUI using a label widget.

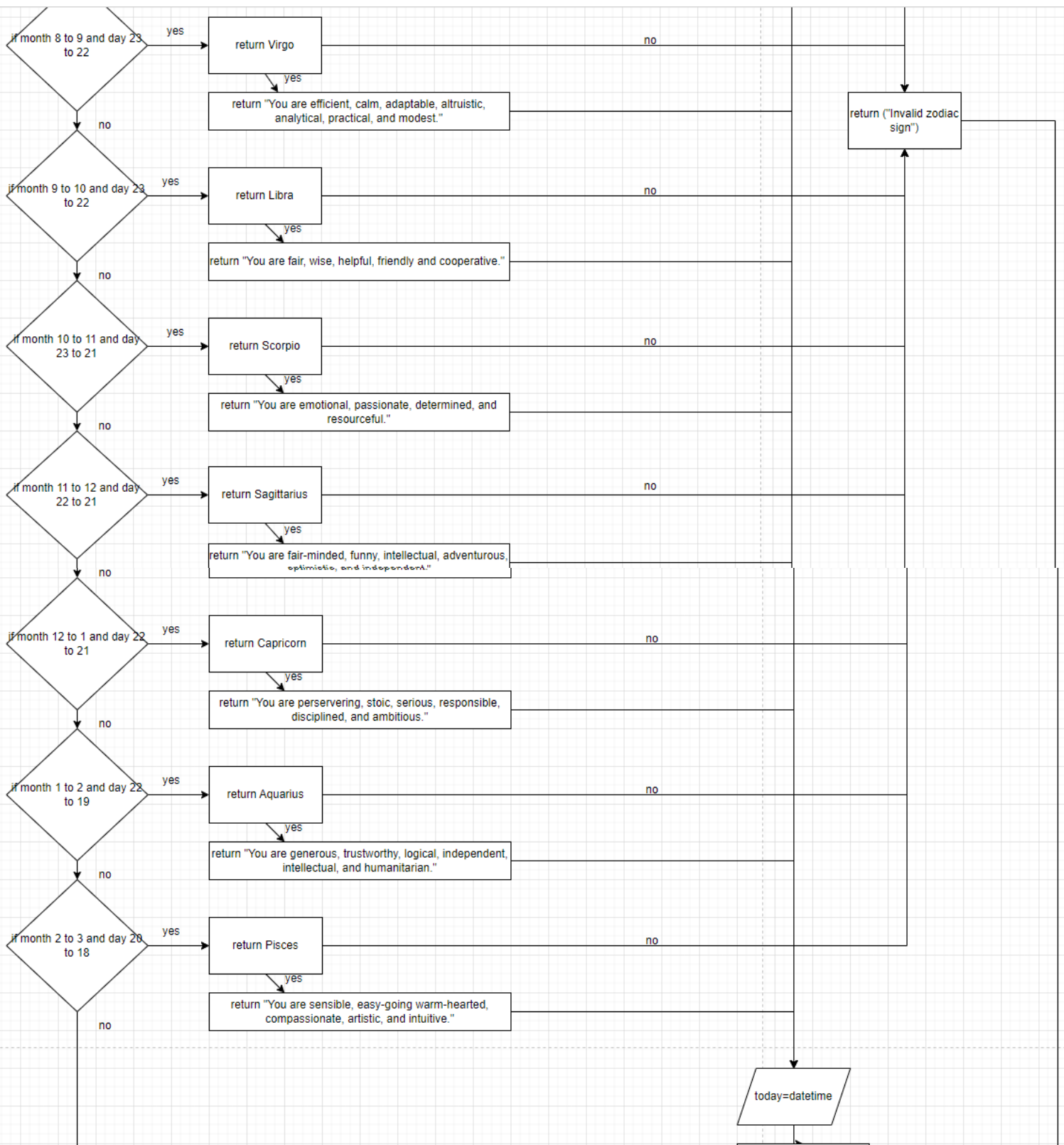
#### Clear Button:

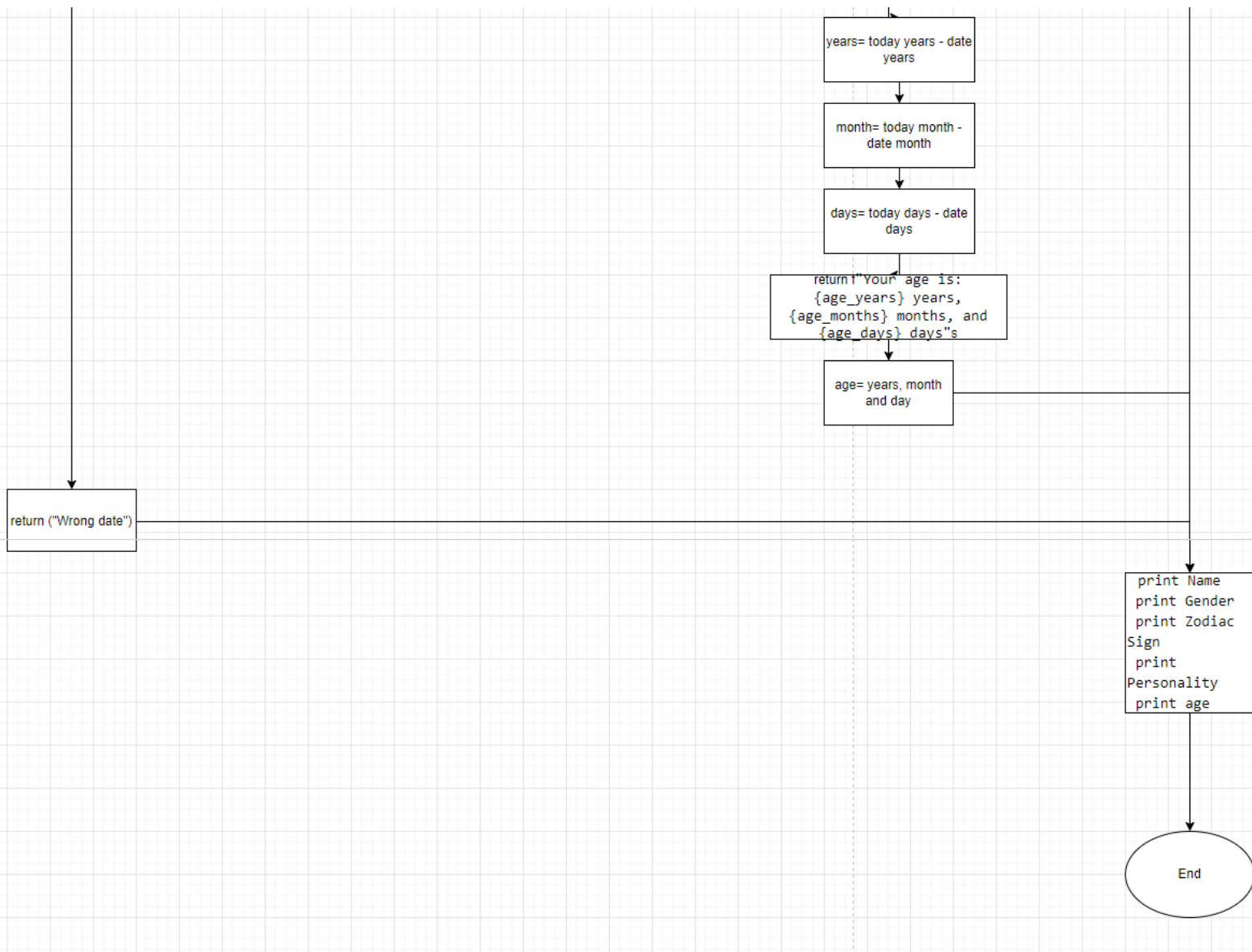
The "Clear" button resets all input fields and clears the result label when clicked.

## 2.0 FLOW CHART









## 3.0 Coding

### 3.1 Python Programming



```
1 #python
2 import tkinter as tk
3 from datetime import datetime
4 import random
5
6 def save():
7     #user info
8     name = name_entry.get()
9     gender = gender_entry.get()
10    date = dob_entry.get()
11
12    #create star
13    def create_star(canvas):
14        x = random.randint(0, 800)
15        y = random.randint(0, 600)
16        size = random.randint(1, 3)
17        canvas.create_oval(x, y, x+size, y+size, fill="white")
18
19    def twinkling_stars():
20        root.title("Zodiac Sign Personality Determination")
21        root.geometry("1280x1830")
22
23    root = tk.Tk()
24
25    # Placing the canvas to cover the whole window
26    canvas = tk.Canvas(root, width=800, height=600, bg="black")
27    canvas.place(x=0, y=0, relwidth=1, relheight=1)
28
29    # Labels for input fields
30    name_label=tk.Label(root ,text="ZODIAC SIGN", font=("castellar", 50), bg=("gold"))
31    name_label.pack()
32
33    name_label = tk.Label(root, text="Name:",font=('slab serif', 25), bg=("blue"))
34    name_label.pack(padx=10, pady=12)
35    name_entry = tk.Entry(root)
36    name_entry.pack(padx=5, pady=6)
37
38    gender_label = tk.Label(root, text="Gender:", font=('slab serif', 25), bg=("blue"))
39    gender_label.pack(padx=20, pady=22)
40    gender_entry = tk.Entry(root)
41    gender_entry.pack(padx=5, pady=6)
42
43    dob_label = tk.Label(root, text="Date of Birth (YYYY-MM-DD):", font=('slab serif', 25), bg=("blue"))
44    dob_label.pack(padx=26, pady=28)
45    dob_entry = tk.Entry(root)
46    dob_entry.pack(padx=5, pady=6)
47
48    for _ in range(100):
49        create_star(canvas)
50
51    ..
52
53    # Function to calculate zodiac sign based on date of birth
54    def calculate_zodiac_sign(day, month):
55        if (month == 3 and day >= 21) or (month == 4 and day <= 19):
56            return "Aries"
57        elif (month == 4 and day >= 20) or (month == 5 and day <= 20):
58            return "Taurus"
59        elif (month == 5 and day >= 21) or (month == 6 and day <= 20):
60            return "Gemini"
61        elif (month == 6 and day >= 21) or (month == 7 and day <= 22):
62            return "Cancer"
63        elif (month == 7 and day >= 23) or (month == 8 and day <= 22):
64            return "Leo"
65        elif (month == 8 and day >= 23) or (month == 9 and day <= 22):
66            return "Virgo"
67        elif (month == 9 and day >= 23) or (month == 10 and day <= 22):
68            return "Libra"
69        elif (month == 10 and day >= 23) or (month == 11 and day <= 21):
70            return "Scorpio"
71        elif (month == 11 and day >= 22) or (month == 12 and day <= 21):
72            return "Sagittarius"
73        elif (month == 12 and day >= 22) or (month == 1 and day <= 19):
74            return "Capricorn"
75        elif (month == 1 and day >= 20) or (month == 2 and day <= 18):
76            return "Aquarius"
77        elif (month == 2 and day >= 19) or (month == 3 and day <= 20):
78            return "Pisces"
79        else:
80            return ("Wrong date")
81
```

```

82 # Function to determine personality based on zodiac sign
83 def determine_personality(zodiac_sign):
84     if zodiac_sign == "Aries":
85         return "brave, willful, enterprising humanitarianism, productive, Confident and determined"
86     elif zodiac_sign == "Taurus":
87         return "practical, recoursesful, energetic, tidy, confident, Patient and reliable"
88     elif zodiac_sign == "Gemini":
89         return "You are skillful, humorous, seductive, imaginative, curious, adaptable, and sociable."
90     elif zodiac_sign == "Cancer":
91         return "You are intelligent, crafty, strong will, intuitive, emotional, and compassionate."
92     elif zodiac_sign == "Leo":
93         return "You are dominant, courageous, confident, ambitious, aristocratic, idealistic and generous."
94     elif zodiac_sign == "Virgo":
95         return "You are efficient, calm, adaptable, altruistic, analytical, practical, and modest."
96     elif zodiac_sign == "Libra":
97         return "You are fair, wise, helpful, friendly and cooperative."
98     elif zodiac_sign == "Scorpio":
99         return "You are emotional, passionate, determined, and resourceful."
100    elif zodiac_sign == "Sagittarius":
101        return "You are fair-minded, funny, intellectual, adventurous, optimistic, and independent."
102    elif zodiac_sign == "Capricorn":
103        return "You are perservering, stoic, serious, responsible, disciplined, and ambitious."
104    elif zodiac_sign == "Aquarius":
105        return "You are generous, trustworthy, logical, independent, intellectual, and humanitarian."
106    elif zodiac_sign == "Pisces":
107        return "You are sensible, easy-going warm-hearted, compassionate, artistic, and intuitive."
108    else:
109        return ("Invalid zodiac sign.")
110
111 # Function to calculate age in years, months, and days
112 def calculate_age(dob):
113     today = datetime.today()
114     dob_entry = datetime.strptime(dob, '%Y-%m-%d')
115
116     # Calculate age in years
117     age_years = today.year - dob_entry.year
118     if today.month < dob_entry.month or (today.month == dob_entry.month and today.day < dob_entry.day):
119         age_years -= 1
120
121     # Calculate age in months and days
122     dob_month_day = datetime(today.year, dob_entry.month, dob_entry.day)
123     if today < dob_month_day:
124         age_months = today.month + 12 - dob_entry.month
125     else:
126         age_months = today.month - dob_entry.month
127
128     age_days = (today - dob_month_day).days
129
130     return f"Your age is: {age_years} years, {age_months} months, and {age_days} days"
131
132 def calculate_zodiac_and_personality():
133     dob = dob_entry.get()
134     dob_date = datetime.strptime(dob, "%Y-%m-%d")
135     zodiac_sign = calculate_zodiac_sign(dob_date.day, dob_date.month)
136     personality = determine_personality(zodiac_sign)
137     age_result = calculate_age(dob)
138     result_label.config(text=f"Zodiac Sign: {zodiac_sign}\nPersonality: {personality}\n{age_result}")
139
140 # Display result in the terminal
141 print(f"Name: {name_entry.get()}")
142 print(f"Gender: {gender_entry.get()}")
143 print(f"Zodiac Sign: {zodiac_sign}")
144 print(f"Personality: {personality}")
145 print(age_result)
146 print("\n")
147
148 # Create a button to calculate zodiac sign and personality
149 calculate_button = tk.Button(root, text="Calculate", command=calculate_zodiac_and_personality)
150 calculate_button.pack()
151
152 save_button = tk.Button(root, text="save", command=save)
153 save_button.pack()
154
155 # Display the result
156 result_label = tk.Label(root, text="")
157 result_label.pack()
158
159 # Function to clear all input fields
160 def clear_fields():
161     name_entry.delete(0, 'end')
162     gender_entry.delete(0, 'end')
163     dob_entry.delete(0, 'end')
164     result_label.config(text="")
165
166 # Create a button to clear input fields
167 clear_button = tk.Button(root, text="Clear", command=clear_fields)
168 clear_button.pack()
169
170 # Run the tkinter main loop
171 root.mainloop()
172

```

## 4.0 GRAPHICAL USER INTERFACE (GUI)

Zodiac Sign Personality Determination

# ZODIAC SIGN

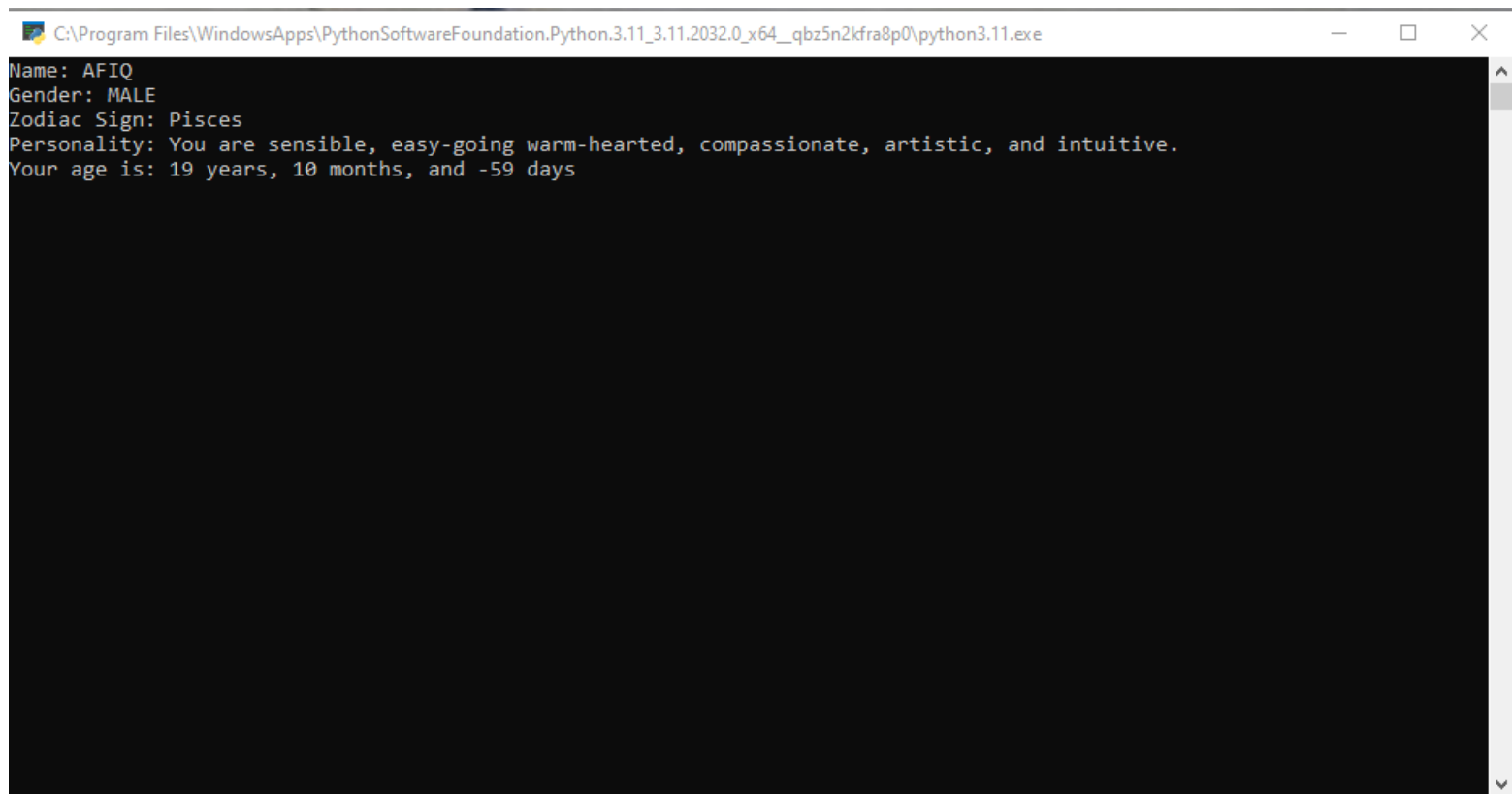
Name:

Gender:

Date of Birth (YYYY-MM-DD):

Calculate  
save  
Clear

## 5.0 TERMINAL

A screenshot of a Windows terminal window. The title bar at the top shows the file path "C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.11\_3.11.2032.0\_x64\_\_qbz5n2kfra8p0\python3.11.exe" and standard window controls (minimize, maximize, close). The terminal area has a black background with white text. The text displayed is the output of a Python script, showing personal information and a personality description. On the right side of the terminal window, there is a vertical scrollbar with a small upward-pointing arrow at the top and a downward-pointing arrow at the bottom.

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.11_3.11.2032.0_x64__qbz5n2kfra8p0\python3.11.exe
Name: AFIQ
Gender: MALE
Zodiac Sign: Pisces
Personality: You are sensible, easy-going warm-hearted, compassionate, artistic, and intuitive.
Your age is: 19 years, 10 months, and -59 days
```

## 6.0 CONCLUSION

In conclusion, the concept of programming zodiac sign determination offers a unique perspective on the correlation between an individual's personality traits and their aptitude for programming. I have explored the different zodiac signs and their corresponding characteristics, highlighting how these traits can be advantageous or disadvantageous in the field of programming. It is important to note that while zodiac sign determination can provide some insights, it should not be seen as a definitive factor in determining one's abilities or success as a programmer.

Firstly, individuals born under certain zodiac signs may possess inherent qualities that align with the skills required in programming. For example, those born under the sign of Gemini are known for their adaptability and quick thinking, which can be highly beneficial in problem-solving situations. On the other hand, individuals born under Taurus may exhibit persistence and attention to detail, making them meticulous programmers who excel at debugging and refining code.

However, it is crucial to recognize that these traits are not exclusive to specific zodiac signs. People from all walks of life can develop these skills through education, practice, and experience. Therefore, it would be unfair to limit opportunities based solely on someone's zodiac sign.

To sum up, while programming zodiac sign determination offers an interesting perspective on personality traits related to programming abilities, it should not be considered as a definitive factor when assessing someone's potential in this field. Instead of relying solely on astrology-based determinations, it is essential to focus on providing equal opportunities for everyone interested in pursuing a career in programming. By fostering inclusivity and recognizing individual talents regardless of astrological factors, we can create a more diverse and thriving community within the world of coding.

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