**Python Project**

**Assignment Specifications**

In 2021, there were thousands of billionaires in the world. We design and implement a program which allows users to search for relevant information of those billionaires. The file named “Billionaire.csv” contains the data set. Each line of the file contains the information for a billionaire, including one’s name, wealth ranking, net worth, age, country, company, and industry. The program will input the data set and display a menu of options to allow users to search for billionaires who meet certain criteria. The menu options are as below.

1. Search by name: Prompt the user to enter a name, and display all his or her information. For example, if the user enters “Bill Gates”, display all information of Bill Gates.

2. Search by rank: Prompt the user to enter two numbers as the rank range, and display all billionaires who fall within the range. The first number should be smaller than the latter. For example, if the user enters “3” and “7”, display all billionaires who rank from 3 to 7. In addition, if the user enters “7” and “3”, the program will display an error message.

3. Search by net worth: Prompt the user to enter two numbers as the net worth range, and display all billionaires who fall within the range. The first number should be smaller than the latter. For example, if the user enters “60” and “90”, display all billionaires whose net worth are from 60 billion to 90 billion. In addition, if the user enters “90” and “60”, the program will display an error message.

4. Search by age: Prompt the user to enter two numbers as the age range, and display all billionaires who fall within the range. The first number should be smaller than the latter. For example, if the user enters “40” and “60”, display all billionaires who are 40 year-old to 60 year-old. In addition, if the user enters “60” and “40”, the program will display an error message.

5. Search by country: Prompt the user to enter a string as a country, and display all billionaires who are from the country. For example, if the user enters “China”, display all billionaires who are from China.

6. Search by source: Prompt the user to enter a string as a company, and display all billionaires who are from the company. For example, if the user enters “Walmart”, display all billionaires who are from Walmart.

7. Search by industry: Prompt the user to enter a string as an industry, and display all billionaires who are from the industry. For example, if the user enters “Technology”, display all billionaires who are from the technology industry.

**Sample Output**

Which function would you like to search by?

To search by name: type 1

To search by rank: type 2

To search by networth: type 3

To search by age: type 4

To search by country: type 5

To search by source/company: type 6

To search by industry: type 7

Type here: 1

Enter name: Bill Gates

Rank Name NetWorth Age Country Source Industry

4 Bill Gates 124.0 65.0 United States Microsoft Technology