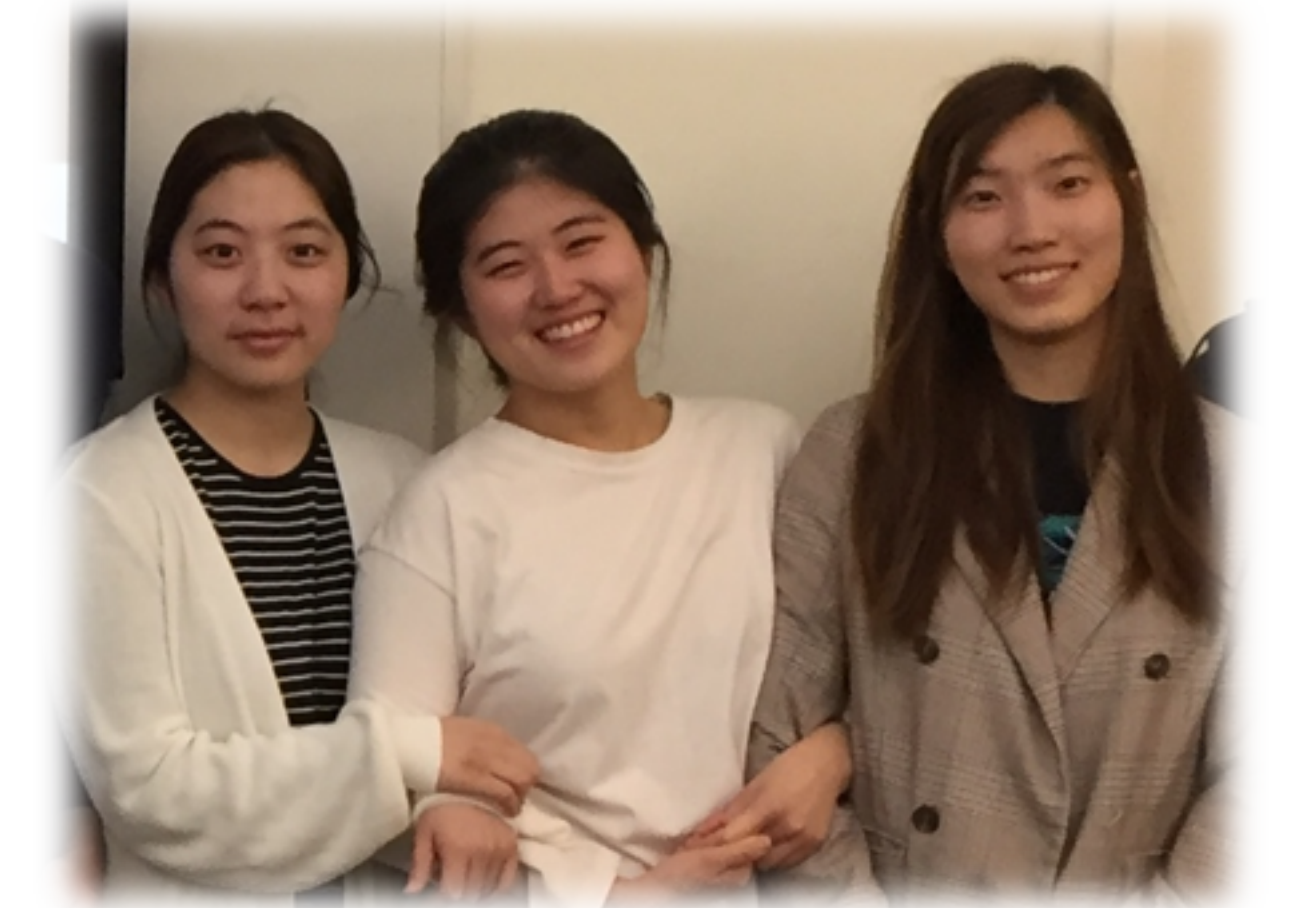NIAGARA UNIVERSITY

WHO AM I : PYTHON AND MBTI PERSONALITY TRAIT

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Introduction

Our project tried to incorporate Python with the field of Psychology that is our major. For this, we offer a personality test to help people get to know who they are and what kind of people they are by using Python. We chose one of the personality tests, that is MBTI (Myers-Briggs Type Indicator).
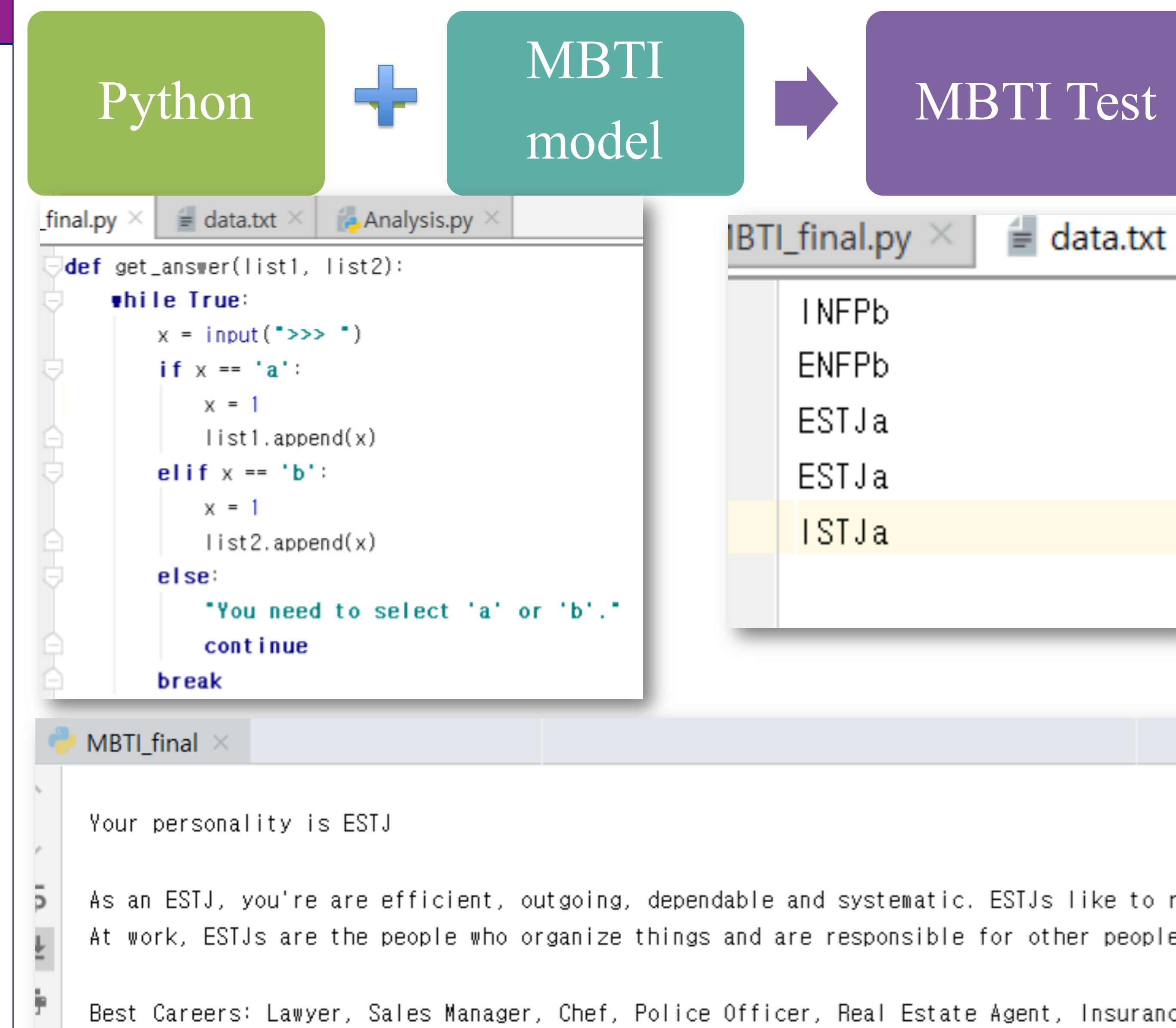
MBTI

- MBTI is based on Carl Gustav Jung's theory of 'psychological types' and is one of the most widely used personality type tests at present.
- Preference of general attitude :
  Extraversion vs Introversion, Sensing vs Intuition, Thinking vs Feeling, Judging vs Perceiving
- 16 kinds of personality types in the test.
  ISTJ, ISTP, ESTP, ESTJ, ISFJ, ISFP, ESFP, ESFJ, INFJ, INFP, ENFP, ENFJ, INTJ, INTP, ENTP,ENTJ

After you answer the whole question, you can get the one personality type that is the closest to you. Also, you can get the explanation of your type and what career can be good for you. It is important to understand about myself. Because when you encounter the problem in our lives, we can figure out the solution that is good for your personality type and deal with the problem well. Also, you can find out the way to work or behave that is the best for you.

If python is incorporated with tests, we do not have to do scoring ourselves but only answering it, so it is very comfortable and efficient. Out project shows that Python can be used not only for the accounting purposes like analysis or calculating but for the variety and practical purposes.

Conclusion

By using python, the user can find out what kind of person he/she is and what kind of career or way to work is good for he/she. Like this, many practical applications of python are expected. We can make any other kinds of questionnaires with python. We can mix any other information of respondents with the data of original answers. If we add options about age, ethnicity, sex, job, SES(Socioeconomic status), etc., we can get more information and do studies to know the personality difference between various groups. Python can be used for any other studies to get information from a large group easily and quickly.

Python + MBTI model → MBTI Test

```
def get_answer(list1, list2):
    while True:
        x = input(">>> ")
        if x == 'a':
            x = 1
            list1.append(x)
        elif x == 'b':
            x = 1
            list2.append(x)
        else:
            "You need to select 'a' or 'b'."
            continue
        break
```

MBTI_final.py   data.txt
INFPb
ENFPb
ESTJa
ESTJa
ISTJa

MBTI_final

```
Your personality is ESTJ

As an ESTJ, you're are efficient, outgoing, dependable and systematic. ESTJs like to ru
At work, ESTJs are the people who organize things and are responsible for other people

Best Careers: Lawyer, Sales Manager, Chef, Police Officer, Real Estate Agent, Insurance
```

Strength and Weakness

The combination with python and psychology

Python is commonly used for developing a complex application like scientific data analysis and numeric application. However, as we have learned from the class, we have asked ourselves "How can we utilize python in the other field with a creative and interesting way?" We want to come up with the practical value in our major. We think that this approach helps people to feel more friendly and interested in python programming.

Easy and usable repeatedly functions

The typical advantage of python is that it can be used over and over again by making several functions. Within the function, we used the if/else function to divide easily into two types. Understanding the pattern of basic algorithms makes it easy to apply to more advanced projects.

Use only basic functions and patterns

It is meaningful in that the basic concepts learned in class are applied to real life and are associated with our interests. There are boundless possibilities in the future using this.

Design and Development

Method

In this project, the final goal is to notify the respondents their personality after they answer all questions of the MBTI test. We wrote a code about this project and in that process, define three functions to get the result of respondents' personality.

get_answer() function

This function is for collection the answers. When the respondent reply to the questions, this function would append the value to the list to which the question is related. For the case that respondents do not reply within options, we put "else" to repeat the code.

comparison() function

This function is for deciding the letter for each category. After gathering all of the answers, we should determine the letter type for each category. For that, we should compare the total sum number between two options in one category.

get_personality() function

This function is for explaining the personality to the respondent. In this function, we use "if & elif" to verify all possible cases. Once we know the type, we use "print" to output the interpretation.

Code about Questions

After defining these three functions, we wrote code to receive the answers about questions. There are 4 categories in MBTI and each category has two options. With using three functions we defined, this project returns the personality to the respondents.

Future Work

In this project, personality was distinguished by simple questions. However, more questions based on detailed classifications are needed to apply to a more professional personality trait analysis.

And in the next advanced project, the results obtained from this project can be collected and analyzed. For example, there is a project to compare the personality types of international students. A simple method of research is like this: collect personality data of Asian students and American students respectively. The data collected are then divided into two groups to compare the results. This comparison shows which personality traits are prominent in Asian students and which personality types are common to American students. This is the process of creating a function and collecting data and applying that data.