

Personality Types



CS362: Intelligent System
Group_4

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Take the test here.

<https://swish.swi-prolog.org/p/PersonalityTypes.pl>

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Introduction

Have you ever pondered the intricacies of your personality and how it intricately weaves into your life and relationships?

Why is it that people exhibit diverse behaviors even in similar situations?

What propels some towards solitary work while others thrive in collaborative environments?

What unique characteristics define your individuality amidst a sea of personalities?

Delving into the realm of personality types unveils answers to these thought-provoking questions by unraveling the essence of personalities and their defining traits. Yet, navigating through the maze of different personality types can be daunting, especially for those unacquainted with the intricacies of personality classification. To surmount this challenge, we've crafted a sophisticated system that leverages the power of Prolog language to decode personality types. Our innovative system is designed to discern a spectrum of personality types, promising insights that transcend mere understanding. As this system evolves into an expert resource, its potential benefits extend to psychologists, students, and anyone captivated by the nuances of personality exploration and analysis. Functioning on a foundation of logical rules and empirical facts, our system seamlessly aligns individual characteristics with established personality archetypes. By engaging users in a thoughtful dialogue about their traits, it unveils the potential personality type that resonates most authentically with them.

Personality Types

ISTJ-A

Introverted Sensor Thinker Judger Assertive



ISTJ-T

Introverted Sensor Thinker Judger Turbulent

ISTP-A

Introverted Sensor Thinker Perceiver Assertive



ISTP-T

Introverted Sensor Thinker Perceiver Turbulent

ISFP-A

Introverted Sensor Feeler Perceiver Assertive



ISFP-T

Introverted Sensor Feeler Perceiver Turbulent

ISFJ-A

Introverted Sensor Feeler Judger Assertive



ISFJ-T

Introverted Sensor Feeler Judger Turbulent

INTP-A

Introverted Intuitior Thinker Perceiver Assertive



INTP-T

Introverted Intuitior Thinker Perceiver Turbulent

INTJ-A

Introverted Intuitior Thinker Judger Assertive



INTJ-T

Introverted Intuitior Thinker Judger Turbulent

INFP-A

Introverted Intuitior Feeler Perceiver Assertive



INFP-T

Introverted Intuitior Feeler Perceiver Turbulent

INFJ-A

Introverted Intuitior Feeler Judger Assertive



INFJ-T

Introverted Intuitior Feeler Judger Turbulent

ESTJ-A

Extroverted Sensor Thinker Judger Assertive



ESTJ-T

Extroverted Sensor Thinker Judger Turbulent

ESTP-A

Extroverted Sensor Thinker Perceiver Assertive



ESTP-T

Extroverted Sensor Thinker Perceiver Turbulent

ESFP-A

Extroverted Sensor Feeler Perceiver Assertive



ESFP-T

Extroverted Sensor Feeler Perceiver Turbulent

ESFJ-A

Extroverted Sensor Feeler Judger Assertive



ESFJ-T

Extroverted Sensor Feeler Judger Turbulent

ENTP-A

Extroverted Intuitior Thinker Perceiver Assertive



ENTP-T

Extroverted Intuitior Thinker Perceiver Turbulent

ENTJ-A

Extroverted Intuitior Thinker Judger Assertive



ENTJ-T

Extroverted Intuitior Thinker Judger Turbulent

ENFP-A

Extroverted Intuitior Feeler Perceiver Assertive



ENFP-T

Extroverted Intuitior Feeler Perceiver Turbulent

ENFJ-A

Extroverted Intuitior Feeler Judger Assertive



ENFJ-T

Extroverted Intuitior Feeler Judger Turbulent

Code

```
/*FACTS*/
```

```
/* Personality types */
```

```
type(1, 'ISTJ-A! Diligent and fact-oriented individuals, whose reliability is unquestionable').
type(2, 'ISFJ-A! Dedicated and warm protectors, always ready to defend their loved ones').
type(3, 'INFJ-A! Charismatic and inspiring leaders who mesmerize their listeners').
type(4, 'INTJ-A! Imaginative and strategic thinkers with a plan for every situation').
type(5, 'ISTP-A! Bold and practical experimenters, masters of various tools').
type(6, 'ISFP-A! Flexible and charming artists, always exploring new experiences').
type(7, 'INFP-A! Poetic, kind, and altruistic souls, always eager to support noble causes').
type(8, 'INTP-A! Innovative with an insatiable thirst for knowledge').
type(9, 'ESTP-A! Smart, energetic, and perceptive individuals who thrive on excitement').
type(10, 'ESFP-A! Spontaneous, energetic, and enthusiastic people who bring vibrancy to life').
type(11, 'ENFP-A! Enthusiastic, creative, and sociable free spirits who find joy in everything').
type(12, 'ENTP-A! Smart and curious thinkers who love intellectual challenges').
type(13, 'ESTJ-A! Excellent administrators and managers, adept at handling people and tasks').
type(14, 'ESFJ-A! Exceptionally caring, social, and popular individuals always willing to help').
type(15, 'ENFJ-A! Quiet and mystical yet highly inspiring and tireless idealists').
type(16, 'ENTJ-A! Bold, imaginative, and resolute leaders who create opportunities').
type(17, 'ISTJ-T! Practical and fact-oriented individuals, their reliability is never in question').
type(18, 'ISFJ-T! Committed and protective, always ready to defend their loved ones').
type(19, 'INFJ-T! Charismatic leaders who captivate their audience with their presence').
type(20, 'INTJ-T! Visionary and strategic thinkers with meticulously planned approaches').
type(21, 'ISTP-T! Fearless and practical experimenters who excel with various tools').
type(22, 'ISFP-T! Adaptable and charismatic artists, always embracing new adventures').
type(23, 'INFP-T! Poetic, altruistic, and kind-hearted individuals, eager to support noble causes').
type(24, 'INTP-T! Innovative minds with an unquenchable thirst for knowledge and understanding').
type(25, 'ESTP-T! Energetic and perceptive individuals who thrive on challenging environments').
type(26, 'ESFP-T! Spontaneous and enthusiastic, bringing liveliness and joy to every situation').
type(27, 'ENFP-T! Creative and sociable free spirits, always finding reasons to smile and inspire').
type(28, 'ENTP-T! Curious and intellectual thinkers, drawn to challenges and exploration').
type(29, 'ESTJ-T! Efficient administrators and managers, adept at managing both tasks and people').
type(30, 'ESFJ-T! Caring and popular, always ready to lend a helping hand to those in need').
type(31, 'ENFJ-T! Inspirational and tireless idealists, quietly mystical yet deeply motivating').
type(32, 'ENTJ-T! Bold and imaginative leaders, always finding or creating solutions to challenges').
```

```
/*FACTS*/
```

```
/* Questions to determine each dimension */
```

```
question('E', 'Do you tend to focus on the outer world and get energized by social interactions?').
question('S', 'Do you tend to rely on your five senses and focus on what is real and concrete?').
question('T', 'Do you tend to make decisions based on logic and objective analysis?').
question('J', 'Do you tend to prefer a structured and organized lifestyle?').
question('A', 'Do you tend to be generally calm and confident in most situations?').
```

Code

```
/*RULES*/
```

```
/* Entry point of the expert system */
```

```
identify_type :-
```

```
    write('Answer the following questions with "yes." or "no."'), nl,
    retractall(answer(_)), % Remove existing answer facts
    identify_dimension('E', Extraversion),
    identify_dimension('S', Sensing),
    identify_dimension('T', Thinking),
    identify_dimension('J', Judging),
    identify_dimension('A', Assertive),
    determine_type(Extraversion, Sensing, Thinking, Judging, Assertive).
```

```
/*RULES*/
```

```
/* Ask user a question and record the answer */
```

```
identify_dimension(Dimension, Answer) :-
```

```
    question(Dimension, Question),
    write(Question), write(' '),
    read(Response),
    (Response == yes ->
        Answer = Dimension ;
        opposite_trait(Dimension, OppositeAnswer),
        Answer = OppositeAnswer ).
```

```
/*RULES*/
```

```
/* Determine the personality type based on the dimensions */
```

```
determine_type(Extraversion, Sensing, Thinking, Judging, Assertive) :-
    type_number([Extraversion, Sensing, Thinking, Judging, Assertive], TypeNumber),
    type(TypeNumber, PersonalityType),
    write('Your MBTI personality type is: '), write(PersonalityType), nl.
```

```
/*FACTS*/
```

```
/*Mapping opposite traits*/
```

```
opposite_trait('E', 'I').
opposite_trait('I', 'E').
opposite_trait('S', 'N').
opposite_trait('N', 'S').
opposite_trait('T', 'F').
opposite_trait('F', 'T').
opposite_trait('J', 'P').
opposite_trait('P', 'J').
opposite_trait('A', 'T').
opposite_trait('T', 'A').
```

Code

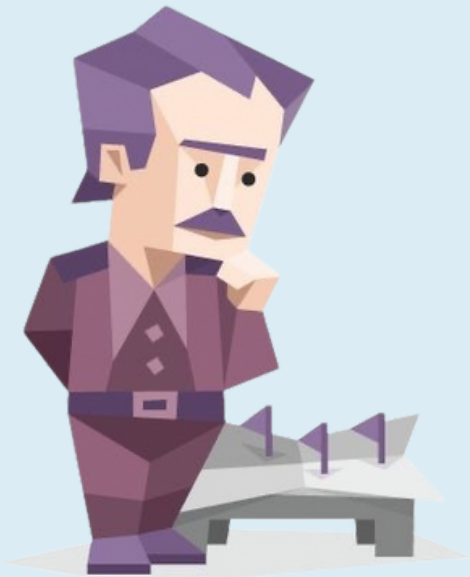
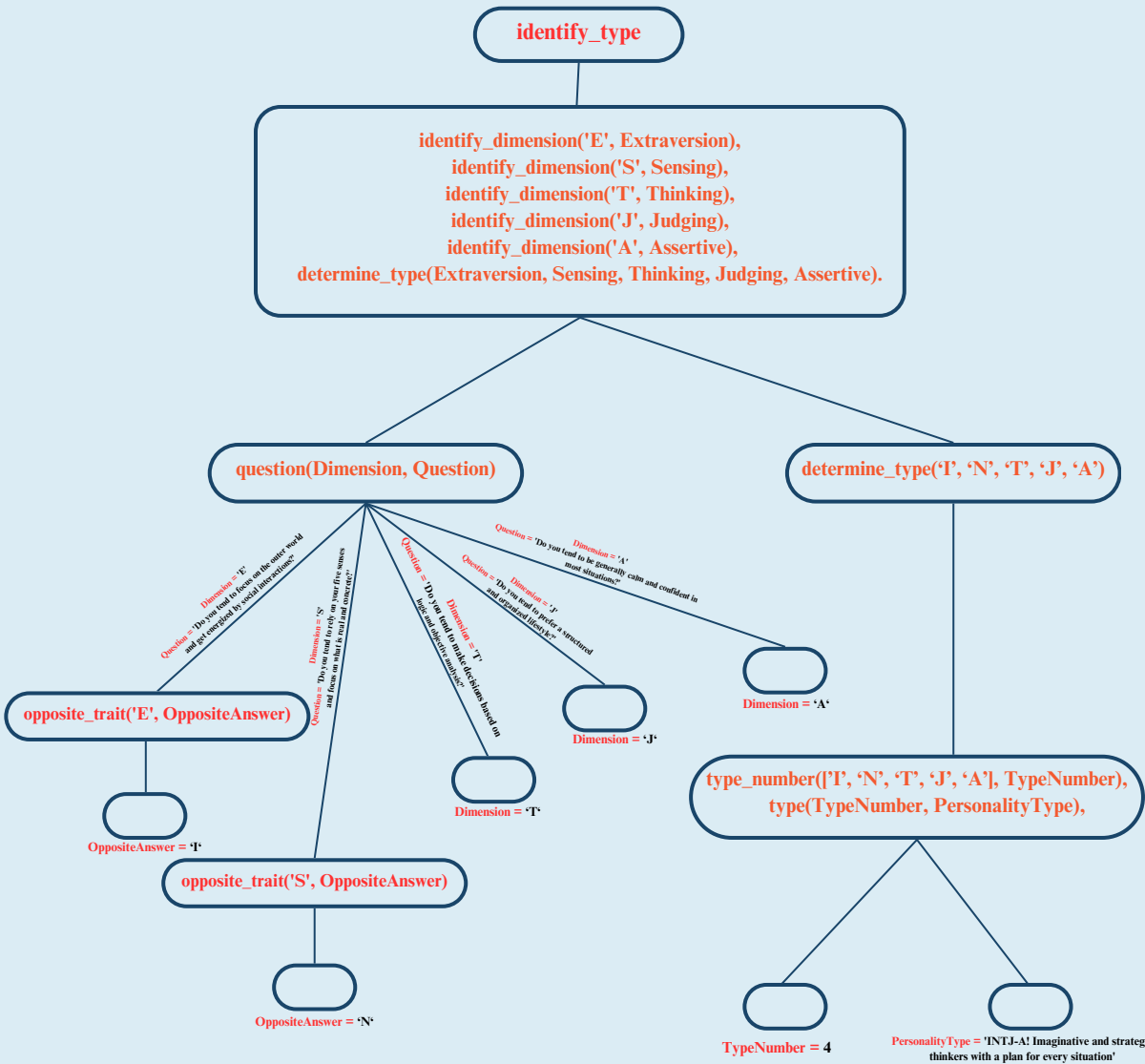
```
/*RULES*/
```

```
/* Determine the type number based on the dimensions */
```

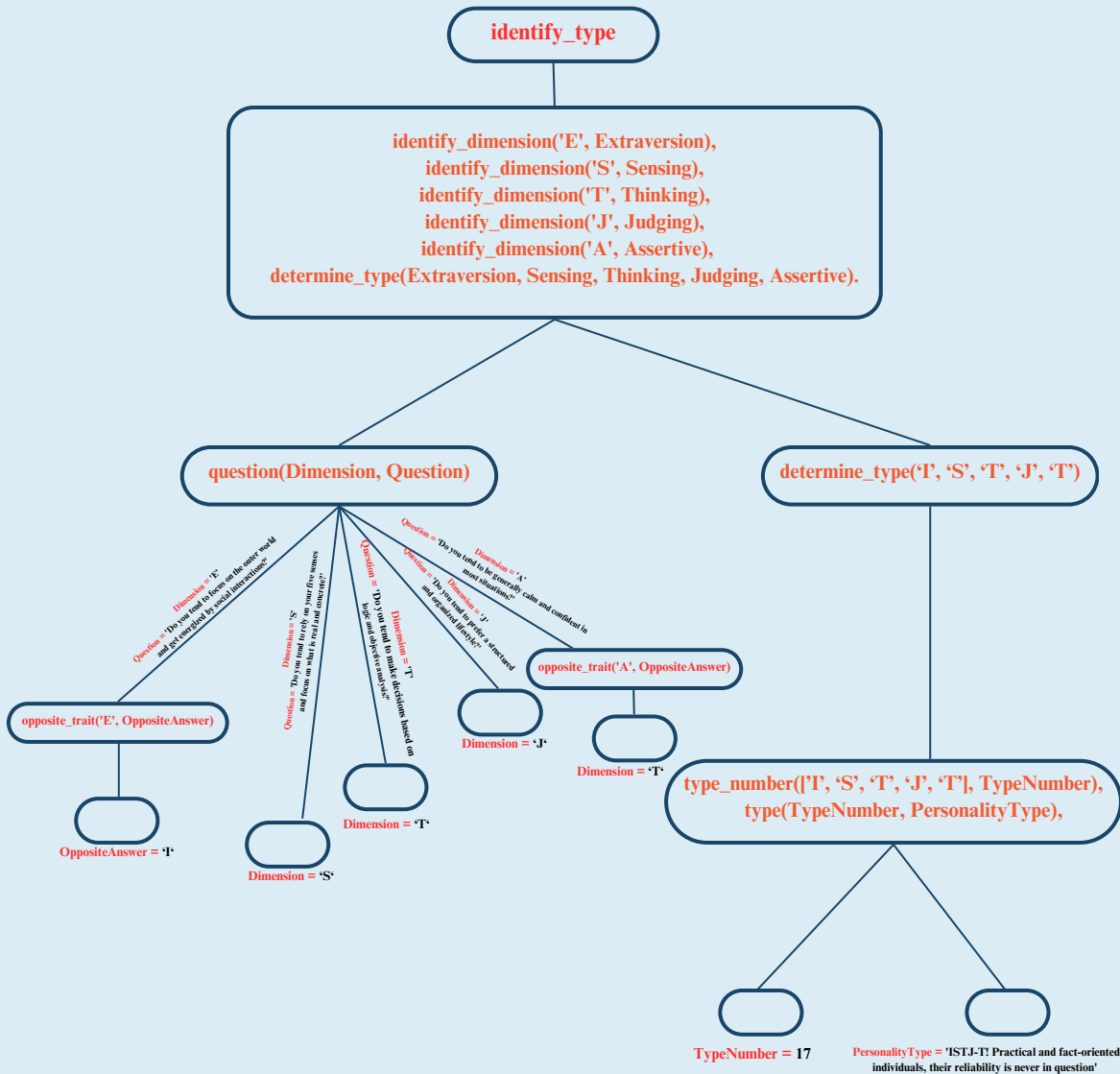
```
type_number([E, S, T, J, A], TypeNumber) :-
```

```
(E == 'I', S == 'S', T == 'T', J == 'J', A == 'A' -> TypeNumber = 1 ; %ISTJ-A
E == 'I', S == 'S', T == 'F', J == 'J', A == 'A' -> TypeNumber = 2 ; %ISFJ-A
E == 'I', S == 'N', T == 'F', J == 'J', A == 'A' -> TypeNumber = 3 ; %INFJ-A
E == 'I', S == 'N', T == 'T', J == 'J', A == 'A' -> TypeNumber = 4 ; %INTJ-A
E == 'I', S == 'S', T == 'T', J == 'P', A == 'A' -> TypeNumber = 5 ; %ISTP-A
E == 'I', S == 'S', T == 'F', J == 'P', A == 'A' -> TypeNumber = 6 ; %ISFP-A
E == 'I', S == 'N', T == 'F', J == 'P', A == 'A' -> TypeNumber = 7 ; %INFP-A
E == 'I', S == 'N', T == 'T', J == 'P', A == 'A' -> TypeNumber = 8 ; %INTP-A
E == 'E', S == 'S', T == 'T', J == 'P', A == 'A' -> TypeNumber = 9 ; %ESTP-A
E == 'E', S == 'S', T == 'F', J == 'P', A == 'A' -> TypeNumber = 10 ; %ESFP-A
E == 'E', S == 'N', T == 'F', J == 'P', A == 'A' -> TypeNumber = 11 ; %ENFP-A
E == 'E', S == 'N', T == 'T', J == 'P', A == 'A' -> TypeNumber = 12 ; %ENTP-A
E == 'E', S == 'S', T == 'T', J == 'J', A == 'A' -> TypeNumber = 13 ; %ESTJ-A
E == 'E', S == 'S', T == 'F', J == 'J', A == 'A' -> TypeNumber = 14 ; %ESFJ-A
E == 'E', S == 'N', T == 'F', J == 'J', A == 'A' -> TypeNumber = 15 ; %ENFJ-A
E == 'E', S == 'N', T == 'T', J == 'J', A == 'A' -> TypeNumber = 16 ; %ENTJ-A
E == 'I', S == 'S', T == 'T', J == 'J', A == 'T' -> TypeNumber = 17 ; %ISTJ-T
E == 'I', S == 'S', T == 'F', J == 'J', A == 'T' -> TypeNumber = 18 ; %ISFJ-T
E == 'I', S == 'N', T == 'F', J == 'J', A == 'T' -> TypeNumber = 19 ; %INFJ-T
E == 'I', S == 'N', T == 'T', J == 'J', A == 'T' -> TypeNumber = 20 ; %INTJ-T
E == 'I', S == 'S', T == 'T', J == 'P', A == 'T' -> TypeNumber = 21 ; %ISTP-T
E == 'I', S == 'S', T == 'F', J == 'P', A == 'T' -> TypeNumber = 22 ; %ISFP-T
E == 'I', S == 'N', T == 'F', J == 'P', A == 'T' -> TypeNumber = 23 ; %INFP-T
E == 'I', S == 'N', T == 'T', J == 'P', A == 'T' -> TypeNumber = 24 ; %INTP-T
E == 'E', S == 'S', T == 'T', J == 'P', A == 'T' -> TypeNumber = 25 ; %ESTP-T
E == 'E', S == 'S', T == 'F', J == 'P', A == 'T' -> TypeNumber = 26 ; %ESFP-T
E == 'E', S == 'N', T == 'F', J == 'P', A == 'T' -> TypeNumber = 27 ; %ENFP-T
E == 'E', S == 'N', T == 'T', J == 'P', A == 'T' -> TypeNumber = 28 ; %ENTP-T
E == 'E', S == 'S', T == 'T', J == 'J', A == 'T' -> TypeNumber = 29 ; %ESTJ-T
E == 'E', S == 'S', T == 'F', J == 'J', A == 'T' -> TypeNumber = 30 ; %ESFJ-T
E == 'E', S == 'N', T == 'F', J == 'J', A == 'T' -> TypeNumber = 31 ; %ENFJ-T
E == 'E', S == 'N', T == 'T', J == 'J', A == 'T' -> TypeNumber = 32). %ENTJ-T
```

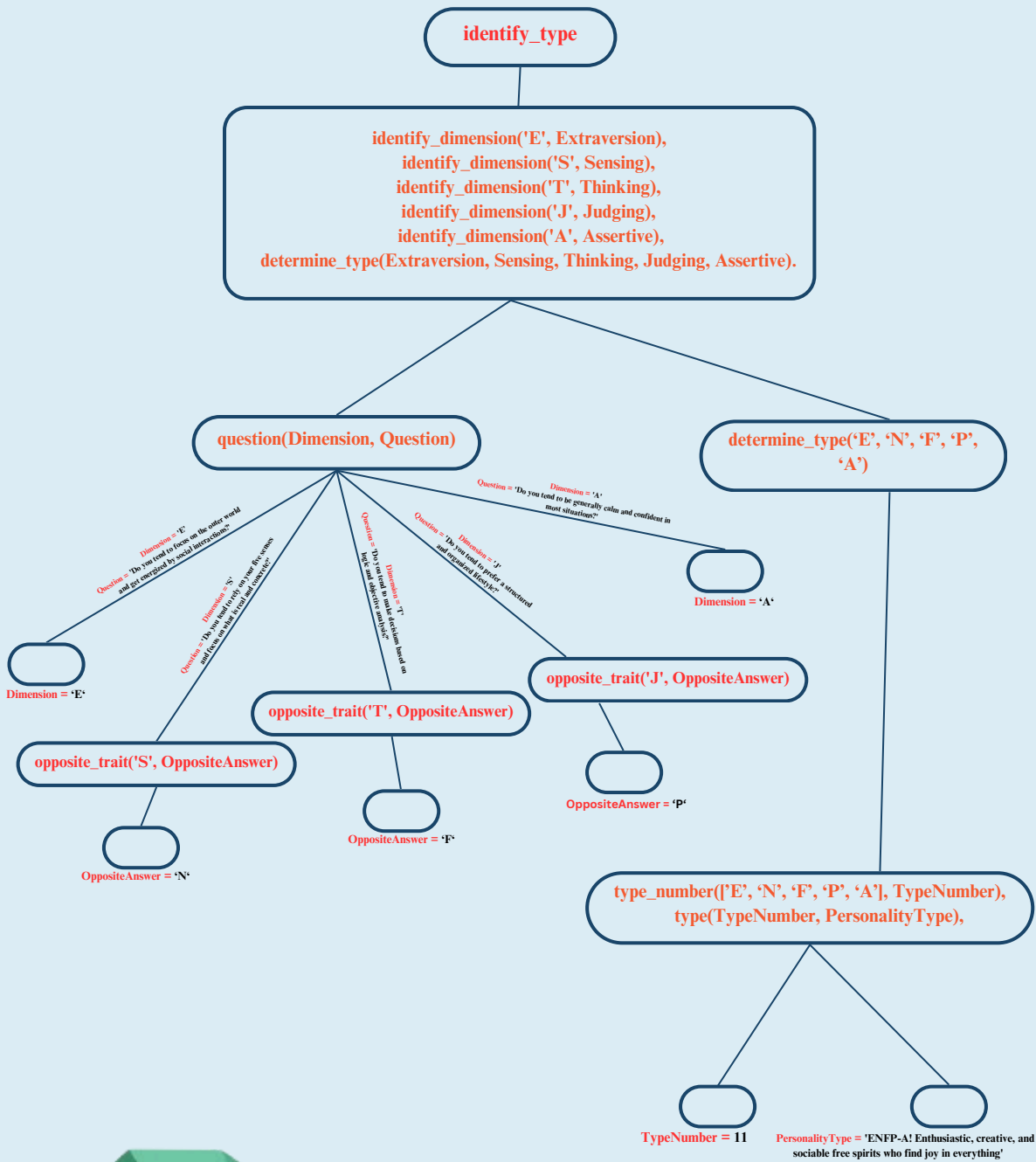

Search tree



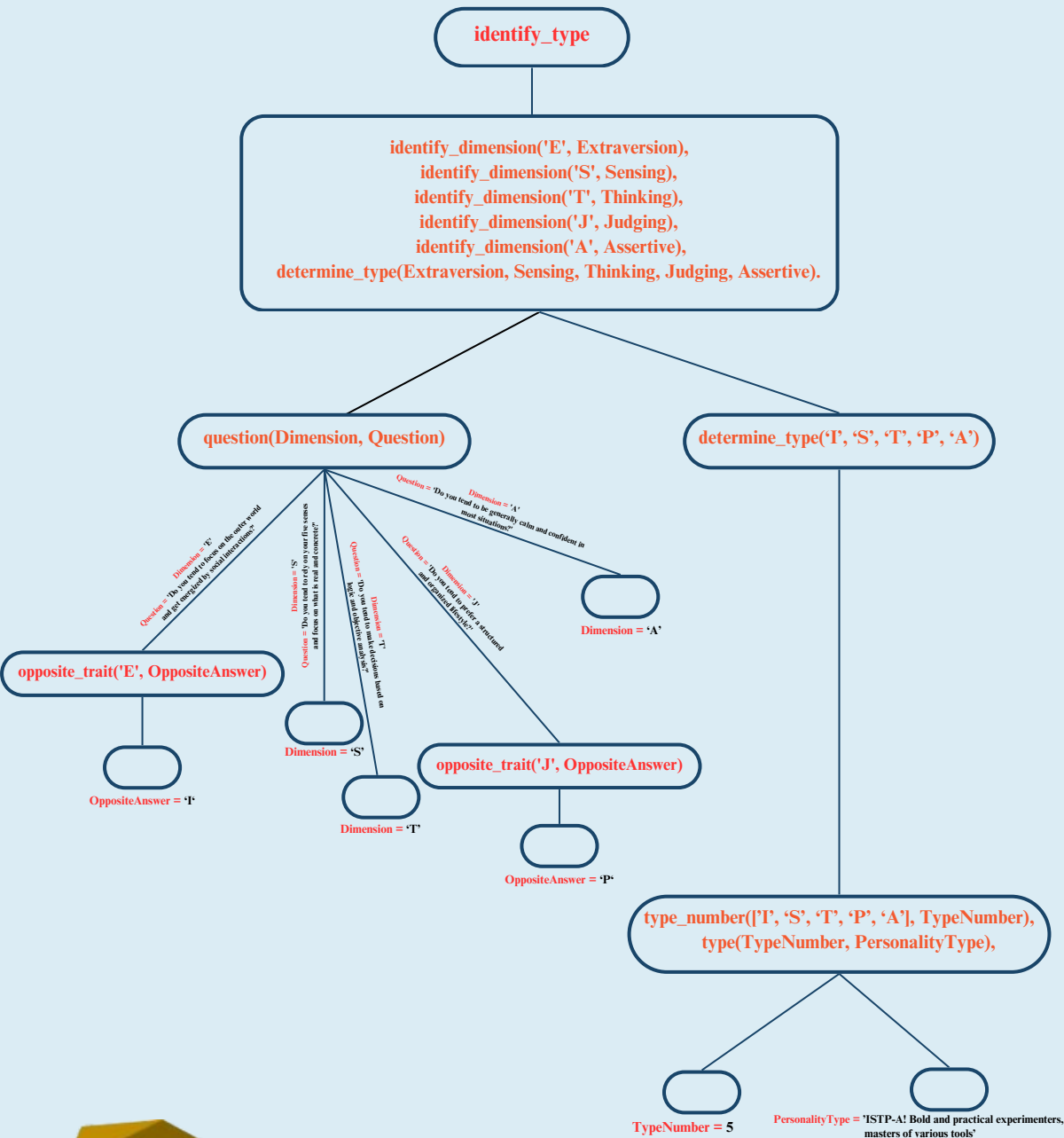
Search tree



Search tree



Search tree



Sample output



⚙ identify_type.

Answer the following questions with "yes." or "no."

Do you tend to focus on the outer world and get energized by social interactions?

no.

Do you tend to rely on your five senses and focus on what is real and concrete?

no.

Do you tend to make decisions based on logic and objective analysis?

no.

Do you tend to prefer a structured and organized lifestyle?

yes.

Do you tend to be generally calm and confident in most situations?

no.

Your MBTI personality type is: INFJ-T! Charismatic leaders who captivate their audience with their presence

true



⚙ identify_type.

Answer the following questions with "yes." or "no."

Do you tend to focus on the outer world and get energized by social interactions?

yes.

Do you tend to rely on your five senses and focus on what is real and concrete?

yes.

Do you tend to make decisions based on logic and objective analysis?

no.

Do you tend to prefer a structured and organized lifestyle?

no.

Do you tend to be generally calm and confident in most situations?

yes.

Your MBTI personality type is: ESFP-A! Spontaneous, energetic, and enthusiastic people who bring vibrancy to life

true

Team Roles

	Afnan Alsahli	Rahaf Alrehaili	Jawaher Alluhaybi	Rafaa Alalawi
Introduction			✓	✓
Facts			✓	✓
Rules	✓	✓		
Search Tree	✓	✓	✓	✓
Sample Outputs	✓	✓		
Documentation	✓	✓	✓	✓