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Key Concepts

\* print

\* input

\* type conversion, e.g., int('3').

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P0. Write a program to print out:

'Hello, World. I am really happy.'

Example:

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Hello, World. I am really happy.

==================================================

P1. Write a program to print out:

'... what I type inside the quote is printed out exactly ... with a space; with double spaces withoutanyspace ...'

Example:

==================================================

... what I type inside the quote is printed out exactly ... with a space; with double spaces withoutanyspace ...

==================================================

P2. Write a program to ask a user:"Hey, how's your class? "

Example:

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Hey, how's your class? **The best.**

==================================================

A **bold** font indicates what a user might type in.

*Caution! space matters.*

P3. Write a program ask a user: 'What do you like most at school? ' and reflect it back.

Example:

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What do you like most at school? **Computer Programming**

I am glad you like *Computer Programming*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Note! You’ll get partial credit if you do hard code! There are more test cases than the example here.*

P4. Write a program to ask a user favorite number and reflect it back.

Example:

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What is your favorite number? **8**

*8* is a good number.

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A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

P5. Write a program to ask a user age and add 3 to his/her age and tease him/her.

Example:

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How old are you? **19**

You will be graduated at *22*

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A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Hint: (1) ‘+’ and ‘\*’ operator works differently on a string than on a number.*

*(2) int(‘19’) converts from string ‘19’ to a number 19.*

P6. Write a program to get two numbers from a user and add them together and print out the result:

Example:

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a: **8**

b: **16**

a + b = *24*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

P7. Write a program to get two numbers from a user and minus the first one with the second one, and print out the result:

Example:

==================================================

a: **8**

b: **16**

a - b = *-8*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

P8. Write a program to get two numbers from a user and multiply them together, and print out the result:

Example:

==================================================

a: **8**

b: **16**

a\*b = *128*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

Hint: 'a/b' is a string, while a/b is a computation statement.

P9. Write a program to get two numbers from a user and divide the first one by the second one, and print out the result:

Example:

==================================================

a: **8**

b: **16**

a/b = *0.5*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

Hint: 'a/b' is a string, while a/b is a computation statement.

P10. Write a program to get two numbers from a user and divide the first one by the second one, and print out its quotient and remainder:

Example:

==================================================

a: **18**

b: **16**

a/b gives a quotient of *1* and a remainder of *2*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Hint: try // and %.*

P11. Write a program to get two numbers from a user and take the first one to the power of the second one, and print out the result:

Example:

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a: **8**

b: **2**

a^b = *64*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Hint: 2\*\*4 = 16.*

P12. Write a program to get two words from a user and concatenate them together and print it out.

Example:

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word 1: **Python**

word 2: **Great**

(word 1 + word 2) = *PythonGreat*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

P13. Write a program to get one word and one number (integer) from a user and repeat the word as the times specified by the number entered and print it out.

Example:

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word 1: **Python**

number to repeat: **3**

repeat (word 1) = *PythonPythonPython*

==================================================

A **bold** font indicates what a user might type in. An *italic* is what the program reflects from what a user typed in.

*Hint: 3\*'Hello!' = 'Hello! Hello! Hello!'*

P14. Write a program to print out the following quote:

Success is no accident. It is hard work, perseverance, learning, studying, sacrifice and most of all, love of what you are doing or learning to do.

--- Pele

Example:

==================================================

Success is no accident. It is hard work,

perseverance, learning, studying, sacrifice

and most of all, love of what you are doing or learning to do.

--- Pele

==================================================

*Caution! there are 4 lines here and no space at the end of line.*

P15. Write a program to print out the following pattern:

Example:

==================================================

\*\*//\\\\\*\*\*\*\*

\*|\*o\*\*o\*|\*\*\*\*

\*/\*\*\*\*\*\*\\*\*\*\*

|\*\*\\_\_/\*\*|\*\*\*

\*\*\-++-/\*\*\*\*\*

Do you have fun?

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*Hint! when we want to print ‘\’ we do* print("\\").