Chatbot
(Shopping Assistant)

1. Review

2. Project

3. New commands

4. Rule-base AI

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**Chatbot
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list = [1, 2, 3, 4, 5]

1	2	3	4	5

1. Review

If / Else   True or False

                         X

X = 4   ┌─────────┐
                         │   │
                         │   4   │
                         │   │
If X is 4:   └─────────┘

If True   print(x)

                         ┌──────────────┐
                         │ **Result:** │
else: │   │
                         │ 4   │
If False   print("No")   │
                         │   │
                         └──────────────┘

1. Review

Iterate through a list:

list = [1, 2, 3, 4, 5]

for number in list:

    print(number)

1	2	3	4	5

number

?

Dictionary:

fruits = {"apple": 4, "orange": 5, "banana": 3}

Key	Key	Key
Value		

Dictionary:

fruits = {"apple": 4, "orange": 5, "banana": 3}

print(fruits["apple"])

Result:

   4

apple	orange	banana
4	**5**	**3**

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2. Project

1. Greeting with the user
2. Offer our products
3. Let the user choose
4. Take their information
5. Give them a receipt

2. Project

Improve our project

1. Let the users select multiple products
2. Let them choose their desired quantity of each chosen product.
3. Handle unexpected result
4. What else … ?

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1. Review
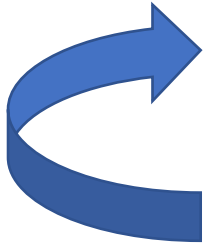
2. Project

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**Chatbot
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3. New commands

While Condition: **True** or **False**

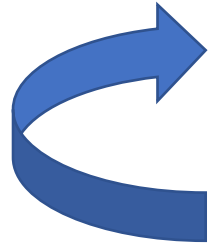**Do something**
(while the condition is TRUE)

3. New commands

While Condition: True or **False**

Do something

(if the condition is FASLE)

While Condition: ← **Start from here again**

if (condition)

continue

-
-

Ignore the rest and
start the loop again

-

While Condition:

if (condition)

break

-
-
-

Ignore the rest and start the loop again

Get me out of the loop!
Start from here

3. New commands

We are not sure if something bad is going to happen!

For example:

The user is trying to enter, which is not valid!

AI: How many Hats would you like to buy? (enter a valid number)

User: so many!

AI : That is not a valid number

AI: How many Hats would you like to buy? (enter a valid number)

3. New commands

We are not sure if something bad is going to happen!

For example:

The user is trying to enter, which is not valid!

AI: How many Hats would you like to buy? (enter a valid number)

User: so many!

AI : That is not a valid number

AI: How many Hats would you like to buy? (enter a valid number)

User: 4

3. New commands

AI: **How many Hats would you like to buy? (enter a valid number)**
User: so many!
AI : **That is not a valid number**
AI: **How many Hats would you like to buy? (enter a valid number)**
User: 4

```
try:

    quantity = input("How many Hats would you like to purchase? ")
    quantity = int(quantity)


except:
    print("Sorry, that is not a valid quantity.")
```

3. New commands

Reminder

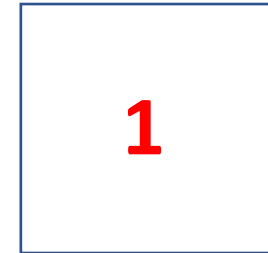**Variable**

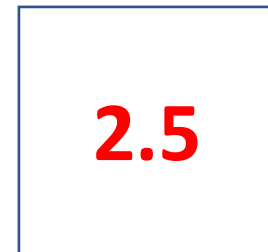x = 1   **Integer(int)**

y = "hello"   **String(str)**

z = 2.5   **float**

x

1

y

hello

z

2.5

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We give you the exact rules to follow

Just follow the rules!

4. Rule-base AI

Homework:

- Complete your own online shopping assistant.
- You can add anything that you want!
- Give me two other examples of rule-based AI and explain briefly, how do you think they are working, and what are the rules? (it can be an imaginary example)