7-1. Rental Car: Write a program that asks the user what kind of rental car they would like. Print a message about that car, such as "Let me see if I can find you a Subaru."

```
In [ ]:  carname = input('What kind of Car do you want?')

         print(f"Let me see if I can find you a {carname.lower().title()}.")
```

Let me see if I can find you a Subaru.

7-2. Restaurant Seating: Write a program that asks the user how many people are in their dinner group. If the answer is more than eight, print a message saying they'll have to wait for a table. Otherwise, report that their table is ready

```
In [ ]:  numberofseats = input('How many seats will you require today?')
         numberofseats = int(numberofseats)

         if numberofseats > 8:
             print(f"Sorry, you will have to wait for a table")
         else:
             print("Here is your table.")
```

Here is your table.

7-3. Multiples of Ten: Ask the user for a number, and then report whether the number is a multiple of 10 or not.

```
In [ ]:  number_input = input('Input Number please.')
         number_input = int(number_input)

         if number_input%10 == 0:
             print(f"{number_input} is a multiple of 10.")
         else:
             print(f"{number_input} is not a multiple of 10.")
```

98 is not a multiple of 10.

7-4. Pizza Toppings: Write a loop that prompts the user to enter a series of pizza toppings until they enter a 'quit' value. As they enter each topping, print a message saying you'll add that topping to their pizza.

```
In [ ]:  question = 'What topping do you want?'

         toppings = []

         accept_input = True
         while accept_input == True:
             topping = input(question).lower()
             if topping == 'quit':
                 accept_input = False
             else:
                 print(f"Your pizza will have: {topping.title()}")
                 toppings.append(topping.title())

         print(f"Your pizza will have :\n{toppings}")
```

```
Your pizza will have: Cheese
Your pizza will have: Sauce
Your pizza will have :
['Cheese', 'Sauce']
```

7-5. Movie Tickets: A movie theater charges different ticket prices depending on a person's age. If a person is under the age of 3, the ticket is free; if they are between 3 and 12, the ticket is $10; and if they are over age 12, the ticket is $15. Write a loop in which you ask users their age, and then tell them the cost of their movie ticket

```python
In [ ]: accept_input = True
        while accept_input == True:
            age = input("What is your age")
            if age == 'quit':
                accept_input = False
                break
            age = int(age) or 0
            if age > 12:
                print(f"Your ticket is $15")
            elif age > 3 :
                print(f"Your ticket is $10")
            else:
                print(f"Your ticket is free")
```

```
Your ticket is $15
Your ticket is free
Your ticket is $15
Your ticket is $15
Your ticket is $15
```

7-6. Three Exits: Write different versions of either Exercise 7-4 or 7-5 that do each of the following at least once:

• Use a conditional test in the while statement to stop the loop.

• Use an active variable to control how long the loop runs.

• Use a break statement to exit the loop when the user enters a 'quit' value.

```python
In [ ]: question = f'What topping do you want?(Max 3) Type quit to exit.'

        toppings = []
        numberoftoppings = 0
        allowinput = True
        while allowinput:
            topping = input(question).lower()
            if numberoftoppings>5:
                allowinput = False
            elif topping == 'quit':
                break
            else:
                print(f"Your pizza will have: {topping.title()}")
                toppings.append(topping.title())
                numberoftoppings+=1

        print(f"Your pizza will have:\n{toppings}")
```

```
Your pizza will have: Cheese
Your pizza will have: Sauce
Your pizza will have:
['Cheese', 'Sauce']
```

7-7. Infinity: Write a loop that never ends, and run it. (To end the loop, press CTRL-C or close the window displaying the output.)

In [ ]:
```python
x = 0
while x < 1:
    print(x)
```

7-8. Deli: Make a list called sandwich_orders and fill it with the names of various sandwiches. Then make an empty list called finished_sandwiches. Loop through the list of sandwich orders and print a message for each order, such as I made your tuna sandwich. As each sandwich is made, move it to the list of finished sandwiches. After all the sandwiches have been made, print a message listing each sandwich that was made.

In [ ]:
```python
sandwich_orders =['chicken','egg','mutton','chinese','indian']

finished_sandwiches = []

for sandwich in sandwich_orders:
    print(f'Your {sandwich.title()} sandwich')
    finished_sandwiches.append(sandwich)
print(f'sandwichs were made:\n')

for sandwich in finished_sandwiches:
    print(f'{sandwich.title()} sandwich')
```

```
Your Chicken sandwich
Your Egg sandwich
Your Mutton sandwich
Your Chinese sandwich
Your Indian sandwich
sandwichs were made:

Chicken sandwich
Egg sandwich
Mutton sandwich
Chinese sandwich
Indian sandwich
```

7-9. No Pastrami: Using the list sandwich_orders from Exercise 7-8, make sure the sandwich 'pastrami' appears in the list at least three times. Add code near the beginning of your program to print a message saying the deli has run out of pastrami, and then use a while loop to remove all occurrences of 'pastrami' from sandwich_orders. Make sure no pastrami sandwiches end up in finished_sandwiches.

In [ ]:
```python
sandwich_orders =['chicken','egg','mutton','chinese','indian','pastrami']

print('There is no Pastrami')

while 'pastrami' in sandwich_orders:
    sandwich_orders.remove('pastrami')


finished_sandwiches = []
```

```python
for sandwich in sandwich_orders:
    print(f'Your {sandwich.title()} sandwich')
    finished_sandwiches.append(sandwich)
print(f'sandwichs were made:\n')

for sandwich in finished_sandwiches:
    print(f'{sandwich.title()} sandwich')
```

```
There is no Pastrami
Your Chicken sandwich
Your Egg sandwich
Your Mutton sandwich
Your Chinese sandwich
Your Indian sandwich
sandwichs were made:

Chicken sandwich
Egg sandwich
Mutton sandwich
Chinese sandwich
Indian sandwich
```

7-10. Dream Vacation: Write a program that polls users about their dream vacation. Write a prompt similar to If you could visit one place in the world, where would you go? Include a block of code that prints the results of the poll.

```python
In [ ]:  destinations = {}
         polled = []


         while True:
             name_input = input('name').lower()
             if name_input == 'quit':
                 break
             poll_input = input("destination").lower()
             if poll_input == 'quit':
                 break

             if name_input not in polled:
                 polled.append(name_input)
                 destinations[name_input.title()] = [poll_input.title()]
             else:
                 destinations[name_input.title()].append(poll_input.title())


         print(destinations)
```

```
{'Anumoy': ['Shimla', 'Kashmir']}
```