Note: You will need to start from where we left off on our last project. If you have not done that project, please ask Shriya or Shubhi to give you the code for the previous project!

1) Directly under the **import requests** line, type in **already_asked_questions = [ ]**
   This will create a list of the questions that the user asks the computer.
2) Above the **def answer_question():** line, type in these lines of code:

```
def check_if_already_asked( question ):
 if question in already_asked_questions:
        return True
```

This is a function that tells the computer what to do to check whether a question has already been asked and what to do if it finds out that the question has already been asked

3) In the **def answer_question():** function, above the **answer = classify(question)** line, insert the code:

```
 question = input("< ")
   existing_question = check_if_already_asked( question )
   if ( existing_question):
      print("You already asked this question.")
      return "You already asked this question"
   else:
      print("This question has not been asked")
```

This code explains what is happening in the function. The previous step was calling the function to do its job, but this function is explaining word for word what the job actually is. It is saying that if a question has already been asked, then the computer should reply "You already asked this question"

4) Below the **answer = classify(question)** line, type in
already_asked_questions.append(question)
This will add a new question to the list of asked questions that we are collecting as a new question is asked.

5) Finally, at the end of the code, type in:

```
while True:
   answer_question()
```

This allows the code to start doing its job. It is like a switch, and typing this code basically "turns on" the code.

```
import requests
already_asked_questions = []

def classify(text):
    key = "bf0ccdb0-2da2-11e9-9bd9-6d74cb2262f9dca94532-bfda-4919-9b85-e581ed9e711e"
    url = "https://machinelearningforkids.co.uk/api/scratch/"+ key + "/classify"

    response = requests.get(url, params={ "data" : text })

    if response.ok:
        responseData = response.json()
        topMatch = responseData[0]
        return topMatch
    else:
        response.raise_for_status()

def check_if_already_asked( question ):

    if question in already_asked_questions:
        return True

    return False

def answer_question():
    question = input("< ")
    existing_question = check_if_already_asked( question )
    if ( existing_question):
        print("You already asked this question.")
        return "You already asked this question"
    else:
        print("This question has not been asked")

    answer = classify(question)
    already_asked_questions.append( question )

    answerclass = answer["class_name"]
```

```
    confidence = answer["confidence"]
    print("confidence is")
    print(confidence)
    if confidence < 50:
        print ( "I don't understand.")

    elif answerclass == "food":
        print ("A dolphin's prey varies depending on species and habitat, but all dolphins eat a
variety of fish, squid, shrimps, jellyfish, and octopi.")
    elif answerclass == "lifespan":
        print ("In the wild, Orcas can live for up to 70 years and bottlenose dolphins can live for at
least 40 years.")
    elif answerclass == "speed":
        print ("Dolphins usually swim about 3 to 7 miles per hour, but they can reach higher speeds
of over 20 miles per hour.")
    elif answerclass == "species":
        print("The dolphin family consists of 36 species, making it the most diverse family of the
cetacean world. Some species are the Orca, the Bottlenose Dolphin, the Amazon River Dolphin,
the Baiji Dolphin, and the Short-beaked Dolphin.")
    elif answerclass == "habitats":
        print("Th habitat of a dolphin depends on its species, but they are found in all oceans of the
world and even in a few rivers. The bottlenose dolphin is found in every ocean in the world
except the Arctic and Antarctic oceans. Most river dolphins live in the rivers of South
American.")
    elif answerclass == "goodbye":
        print ("goodbye, have a nice day!")
print ("What would you like to know about dolphins?")



while True:
    answer_question()

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    if ( existing_question):
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    answer = classify(question)
    already_asked_questions.append( question )

    answerclass = answer["class_name"]
    confidence = answer["confidence"]
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    elif answerclass == "food":
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while True:
    answer_question()
```