

Eating Candy Bar Question

Question)

Here is a program.

```
response = input("Do you want to eat a candy bar (Y/N)? ")

cost_of_candy_bar = 7
number_of_candy_bars = 0
total_cost = 0

SEE_QUESTION
    number_of_candy_bars = number_of_candy_bars + 1
    total_cost = total_cost + cost_of_candy_bar

    response = input("Do you want to eat one more (Y/N)? ")

print("You ate", number_of_candy_bars, "candy bars.")
print("They cost you", total_cost, "dollars.")
```

Here is the output showing the text input and output when the program is run. The text in bold and italic is the text entered by the user.

```
Do you want to eat a candy bar (Y/N)? Y
Do you want to eat one more (Y/N)? Y
Do you want to eat one more (Y/N)? Y
Do you want to eat one more (Y/N)? Y
Do you want to eat one more (Y/N)? N
You ate 4 candy bars.
They cost you 28 dollars.
```

The question is: **How many** of the following lines of code can be used to replace **SEE_QUESTION**? You just need to count how many of the lines of code shown below could be used to replace **SEE_QUESTION**.

For your answer, enter an integer number. Don't use a full stop or anything like that. Your answer will be a number in the range 0 to 10 inclusive.

- `while response == "Y":`
- `while response != "Y":`
- `while response == "N":`

- `while response != "N":`
- `while number_of_candy_bars != 4:`
- `while number_of_candy_bars == 4:`
- `while number_of_candy_bars < 4:`
- `while total_cost != 28:`
- `while total_cost < 35:`
- `while total_cost >= 28:`

Lottery Game Question

Question)

Chris wants to play a lottery game.

Here is how the game works. The lottery game draws **six unique numbers randomly from 1 to 49**. Anyone who guesses all six drawn numbers correctly wins the jackpot.

But Chris is too lazy to guess the numbers so he has written a Python program to help him, which is shown below.

```
import random

# Add the 49 balls in a list
balls = []
for number in range(1, 50):

    balls._____

# For displaying the output
order = ["first", "second", "third", \
         "fourth", "fifth", "sixth"]

# Randomly draw the balls
for ball in range(6):

    # Draw a ball from the remaining balls

    index = random.randint(0, _____ )

    number = balls[index]

    balls._____

    print("The", order[ball], "number is", number)
```

Here is an example of running the program:

Example

The first number is 27
The second number is 3
The third number is 38
The fourth number is 40
The fifth number is 11
The sixth number is 34

You need to fill in the three blanks in the program so that it can work as described above.

Number Indexing Question

Question)

You know when you use `list.index(item)` on a list, it can only return the index of the first occurrence of `item`.

Here is a program demonstrating how to improve `list.index(item)`. It works by looking for all occurrences of a number from a list of numbers.

```
numbers = [ \
    28, 32, 30, 12, 6, \
    6, 7, 9, 10, 17, \
    37, 12, 41, 21, 37, \
    28, 25, 7, 30, 45 \
]

print("The list is:")
print(numbers)

number = int(input("Give me the number: "))

size = len(numbers)
while len(numbers) > 0:
    if numbers[0] == number:
        print(size - len(numbers), end=" ")

        numbers = numbers[ SEE_QUESTION ]
```

As you can see, the content of **SEE_QUESTION** is not shown in the above code.

Here are some examples of using the program. The text in bold and italics (e.g. *hello*) is the text entered by the user.

Example 1

```
The list is:
[28, 32, 30, 12, 6, 6, 7, 9, 10, 17, 37, 12, 41, 21, 37, 28,
25, 7, 30, 45]
Give me the number: 6
4 5
```

Example 2

The list is:

[28, 32, 30, 12, 6, 6, 7, 9, 10, 17, 37, 12, 41, 21, 37, 28, 25, 7, 30, 45]

Give me the number: **30**

2 18

Example 3

The list is:

[28, 32, 30, 12, 6, 6, 7, 9, 10, 17, 37, 12, 41, 21, 37, 28, 25, 7, 30, 45]

Give me the number: **28**

0 15

What is the missing code that needs to replace **SEE_QUESTION**? You need to enter the missing code.