

Coding guessing game with a for loop and while loop.

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In [1]: #This is a number guessing game using a while Loop
import random

#asks for the player's name
print('Hello. What is your name?')
name = input()

print('Well ' + name + ', I am thinking of a number between 1 and 10')
secretNum = random.randint(1,10)
numOfGuesses = 0
allowedGuesses = 6

#player takes the allowed number of guesses
while numOfGuesses < allowedGuesses:
    try: #requires numeric guess
        print('Take a guess.')
        guess = int(input())
        if guess < secretNum:
            print('Your guess is too low')
        elif guess > secretNum:
            print('Your guess is too high')
        else:
            print('You guessed the number!')
            break #breaks out of loop if guess is correct
        numOfGuesses += 1
    except ValueError:
        print('You must enter a numeric number!')

if numOfGuesses == allowedGuesses:
    print('Sorry ' + name + '. You\'ve taken too many guesses. Try again later')
else:
    print('Congratulations ' + name + '! The secret number is ' + str(secretNum))
```

```
Hello. What is your name?
Kin
Well Kin, I am thinking of a number between 1 and 10
Take a guess.
5
Your guess is too high
Take a guess.
3
Your guess is too high
Take a guess.
1
You guessed the number!
Congratulations Kin! The secret number is 1
```

```

In [2]: #this is a guess the number game using a for loop
import random

#asks for the player's name
print('Hello. What is your name?')
name = input()

print('Well ' + name + ', I am thinking of a number between 1 and 10')
secretNum = random.randint(1,10)

#player takes 6 guesses
for guessesTaken in range(1, 7):
    try: #requires numeric guess
        print('Take a guess.')
        guess = int(input())

        if guess < secretNum:
            print('Your guess is too low')
        elif guess > secretNum:
            print('Your guess is too high')
        else:
            print('You guessed it!')
            break #breaks out of loop of guess is correct
    except ValueError:
        print('You must enter a numeric number!')

if guessesTaken == 6:
    print('Sorry ' + name + '. You\'ve taken too many guesses. Try again later')
else:
    print('Congratulations ' + name + '! The secret number is ' + str(secretNum))

```

```

Hello. What is your name?
Kin
Well Kin, I am thinking of a number between 1 and 10
Take a guess.
5
Your guess is too high
Take a guess.
3
Your guess is too high
Take a guess.
1
Your guess is too low
Take a guess.
2
You guessed it!
Congratulations Kin! The secret number is 2

```