**Student Questions:**

Use the following code as a template for generating random numbers in your programs.

# This code generates a random number between 0 to 9

# Stores the value of the random number in the variable "targetNumber"

# Then prints out the result

import random

targetNumber = random.randint(0,9)

print("The random number %d is the target." % targetNumber)

1. Create a basic level program to implement a simple guessing game. Your program should do the following: (Provide a listing of your program below.)
   1. Generate and store a random number using the template code above

- Done

* 1. Ask the user to guess the number (i.e. us the “input” command and sore the answer)

# This code generates a random number between 0 to 9

# Stores the value of the random number in the variable "targetNumber"

# Then prints out the result

randOme = input("Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

* 1. Use an “if” statement to check if the guess is correct

# This code generates a random number between 0 to 9

# Stores the value of the random number in the variable "targetNumber"

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('You win')

else:

print('You lose, Please Play Again!')

* 1. Print “Your guess was correct!” if the guess is correct

# This code generates a random number between 0 to 9

# Stores the value of the random number in the variable "targetNumber"

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('You win')

else:

print('You lose, Please Play Again!')

* 1. Print “Try again” is the check is guess is wrong

# This code generates a random number between 0 to 9

# Stores the value of the random number in the variable "targetNumber"

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('You win')

else:

print('You lose, Please Play Again!')

1. Create a medium level program to implement a better guessing game. Add the following to your basic level program: (Provide a listing of your program below.)
   1. Use “if” and “elif” statements to check if the guess is correct

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('Your Guess was Correct!')

elif(targetNumber > yourself):

print('your guess was low')

else: ('your guess was too high')

* 1. Print “Your guess was correct!” if the guess is correct

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('Your Guess was Correct!')

elif(targetNumber > yourself):

print('your guess was low')

else: ('your guess was too high')

* 1. Print “guess higher” if the guess was less than the target number

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('Your Guess was Correct!')

elif(targetNumber > yourself):

print('your guess was low')

else: ('your guess was too high')

* 1. Print “guess lower” if the guess was greater than the target number

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

print("The random number was %d." % targetNumber)

if(targetNumber == yourself):

print('Your Guess was Correct!')

elif(targetNumber > yourself):

print('your guess was low')

else: ('your guess was too high')

1. Create an enhanced level program to implement the ultimate guessing game. Add the following to your medium level program: (Provide a listing of your program below.)
   1. Add a loop to keep playing the game until the target number is guessed correctly
   2. Exit the loop when the target number is guessed correctly

# Then prints out the result

randOme = input("Hi Welcome to My Game....Please Pick a Number between 0 to 9:")

print("You picked", randOme,)

import random

yourself = int(input("Please Print you Number Again for Confirmation:",))

targetNumber = random.randint(0,9)

while(targetNumber != yourself):

print('Try again!')

yourself = int(input("Please Print you Number Again for Confirmation:",))

print("The random number was %d." % targetNumber)

print('You Win')