ASSIGNMENT-3

1- Write a program to guess the correct number.

```
import random

number = random.randint(1, 100)

guess = int(input("Guess a number between 1 and 100: "))

while guess != number:
    if guess < number:
        print("Too low!")
    else:
        print("Too high!")

    # prompt the user to guess again
    guess = int(input("Guess again: "))

print("Congratulations! You guessed the number.")
```

2-Write a program for rock,paper,scissor (computer vs human)

```
import random

moves = ["rock", "paper", "scissors"]

player_move = input("Enter your move (rock, paper, scissors): ")
while player_move not in moves:
    print("Invalid move. Please try again.")
    player_move = input("Enter your move (rock, paper, scissors): ")

computer_move = random.choice(moves)

print(f"Player move: {player_move}")
print(f"Computer move: {computer_move}")

if player_move == computer_move:
    print("Tie!")
elif player_move == "rock" and computer_move == "scissors":
    print("Player wins!")
elif player_move == "paper" and computer_move == "rock":
    print("Player wins!")
elif player_move == "scissors" and computer_move == "paper":
```

```
    print("Player wins!")
else:
    print("Computer wins!")
```

3-Write a program to generate password with a fixed length

```
import random
import string

length = 12
characters = string.ascii_letters + string.digits + string.punctuation
password = "".join(random.choice(characters) for i in range(length))
print(password)
```

4- Write a program to roll the dice till the 6 number is not appear. (computer vs human)

```
import random

target_number = 6
player_order = ["computer", "human"]
turn = 0
number_rolled = None

while number_rolled != target_number:
    player = player_order[turn % len(player_order)]
    number_rolled = random.randint(1, 6)
    print(f"{player} rolled a {number_rolled}.")
    turn += 1

print(f"{player} wins!")
```