**Problem 1:**

number = int(input ("Enter the number of which the user wants to print the multiplication table: "))

count = 1

while count <= 12:

print (number \* count)

count += 1

**Problem 2:**

start = int(input("Enter the start of range: "))

end = int(input("Enter the end of range: "))

for num in range(start, end + 1):

if num % 2 == 0:

print(num, end=" ")

**Problem 3:**

names = input("Put people's names seperated by space.")

names = names.split()

for i in names:

i = i.upper()

print(i)

**Problem 4:**numbers = input("Put numbers seperated by space.")numbers = numbers.split()for i in numbers: i = int(i) print(i\*i)

**Problem 5:**food = ("noodles","pizza","fries","hamburger")print(len(food))

**Problem 6:**import randomnumber = random.randint(1,100)guess = int(input("Enter a number(0-100): "))while number != guess: print("Wrong guess") guess = int(input("Enter a number(0-100): ")) print("Correct guess")

**Problem 7:**import randomnumber = random.randint(1,100)guess = int(input("Enter a number(1-100): "))while number != guess: print("Wrong guess") guess = int(input("Enter a number(1-100): ")) print("Correct guess")

**Problem 9:**num\_strings = int(input("Enter the number of strings: "))input\_strings = []for \_ in range(num\_strings): string = input("Enter a string: ") input\_strings.append(string)long\_strings = []for string in input\_strings: if len(string) > 5: long\_strings.append(string)print("Strings longer than 5 characters:", long\_strings)

**Problem 10:**numbers = [1,2,2,3,4,4,5,6,6,7]unique = list(set(numbers))print(unique)

**Problem 11:**list\_Coords = [(2,4),(7,4),(11,52),(17,9),(4,5)]coord\_distance = []for cord in list\_Coords: x\_dist = cord[0] - 0 y\_dist = cord[1] - 0 new\_coord = (x\_dist,y\_dist) coord\_distance.append(new\_coord)print(list\_Coords)print(coord\_distance)

**Problem 12:**import randoma = [random.randint(1, 50) for \_ in range(10)]print(a)st = a[0]lt = a[0]l = len(a)for i in range(l): if a[i] < st: st = a[i] elif a[i] > lt: lt = a [i]print("Small: {}, Large: {} ".format(st,lt))

**Problem 13:**num\_elements = int(input("Enter the number of elements in the list: "))num\_list = []for i in range(num\_elements): num = float(input(f"Enter number {i + 1}: ")) num\_list.append(num)for i in range(len(num\_list)): for j in range(i + 1, len(num\_list)): product = num\_list[i] \* num\_list[j] print(f"Product of {num\_list[i]} and {num\_list[j]} is {product}")

**Problem 14:**age = int(input("What is the age?"))if age <= 12: print("Child")elif age >= 13 and age <= 19: print("Teen")elif age >= 20 and age <= 65: print("Adult")elif age >= 66: print("Senior")

**Problem 15:**import randomrandom\_numbers = [random.randint(1, 20) for \_ in range(10)]print(random\_numbers)found = Falsefor num in random\_numbers: if num == 15: print("Found 15!") found = True breakif not found: print("Number 15 was not found in the list.")