1. قم بعمل برنامج يقوم بطباعة مجموع الأرقام التي سيدخلها المستخدم،
وتستطيع إنهاء البرنامج عن طريق الضغط على زر Enter أو كتابة done سواء كانت الحروف BIG or small.

Print the total of the numbers that the user will Enter.
The user can end the program by pressing Enter or by writing done whether the letters were big or small.

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Initialize the total to 0

# Use a while loop to continue asking for numbers until the user enters "done" or a blank line

    # Ask the user for a number or "done"


    # Check if the user has entered "done" or a blank line

        # If the user has entered "done" or a blank line, break out of the loop

        # If the user has entered a number, add it to the total


# Print the total
```

```python
# Initialize the total to 0
total = 0

# Use a while loop to continue asking for numbers until the user enters "done" or
a blank line
while True:
    # Ask the user for a number or "done"
    user_input = input("Enter a number (or 'done' to end the program): ")

    # Check if the user has entered "done" or a blank line
    if user_input.lower() == "done" or user_input == "":
        # If the user has entered "done" or a blank line, break out of the loop
        break
    else:
        # If the user has entered a number, add it to the total
        total += float(user_input)

# Print the total
print("The total is:", total)
```

2. قم بعمل برنامج يقوم بطباعة مجموع الأرقام الزوجية التي سيدخلها المستخدم،
وتستطيع إنهاء البرنامج عن طريق الضغط على زر Enter أو كتابة done سواء كانت الحروف BIG or small.

Print the total of the even numbers that the user will Enter.
The user can end the program by pressing Enter or by writing done whether the letters were big or small.

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Initialize the total to 0

# Use a while loop to continue asking for numbers until the user enters "done" or a blank line

    # Ask the user for a number or "done"

    # Check if the user has entered "done" or a blank line

        # If the user has entered "done" or a blank line, break out of the loop

    # If the user has entered an even number, add it to the total


# Print the total
```

```python
# Initialize the total to 0
total = 0

# Use a while loop to continue asking for numbers until the user enters "done" or
a blank line
while True:
    # Ask the user for a number or "done"
    user_input = input("Enter a number (or 'done' to end the program): ")

    # Check if the user has entered "done" or a blank line
    if user_input.lower() == "done" or user_input == "":
        # If the user has entered "done" or a blank line, break out of the loop
        break

    # If the user has entered an even number, add it to the total
    user_input = float(user_input)
    if user_input % 2 == 0:
        total += user_input

# Print the total
print("The total of the even numbers is:", total)
```

3. قم بعمل برنامج يقوم بطباعة مجموع الأرقام الفردية الموجبة التي سيدخلها المستخدم،
وتستطيع إنهاء البرنامج عن طريق الضغط على زر Enter أو كتابة done سواء كانت الحروف BIG or small.

Print the total of the positive odd numbers that the user will Enter.
The user can end the program by pressing Enter or by writing done whether the letters were big or small.

{//}

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Initialize the total to 0

# Use a while loop to continue asking for numbers until the user enters "done" or
a blank line

    # Ask the user for a number or "done"


    # Check if the user has entered "done" or a blank line

    # If the user has entered "done" or a blank line, break out of the loop


    # If the user has entered a number, check if it's positive and odd

        # If the number is positive and odd, add it to the total

        # If the number is not positive and odd, print an error message


# Print the total
```

{//}

```
# Initialize the total to 0
total = 0

# Use a while loop to continue asking for numbers until the user enters "done" or
a blank line
while True:
    # Ask the user for a number or "done"
    user_input = input("Enter a positive odd number (or 'done' to end the
program): ")

    # Check if the user has entered "done" or a blank line
    if user_input.lower() == "done" or len(user_input) == 0:
        # If the user has entered "done" or a blank line, break out of the loop
        break

    # If the user has entered a number, check if it's positive and odd
    num = float(user_input)
    if num > 0 and num % 2 == 1:
        # If the number is positive and odd, add it to the total
        total += num
    else:
        # If the number is not positive and odd, print an error message
        print("Error:", num, "is not a positive odd number.")

# Print the total
print("The total of the positive odd numbers is:", total)
```

4.قم بعمل برنامج يقوم بطباعة حاصل ضرب الأرقام التي سيدخلها المستخدم، مع تجاهل الصفر،
وتستطيع إنهاء البرنامج عن طريق الضغط على زر Enter أو كتابة done سواء كانت الحروف BIG or small.

Print the multiplication result of the numbers that the user will Enter, ignoring zero.
The user can end the program by pressing Enter or by writing done whether the letters were big or small.

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Initialize the product to 1

# Use a while loop to continue asking for numbers until the user enters "done" or a blank line

    # Ask the user for a number or "done"

    # Check if the user has entered "done" or a blank line

        # If the user has entered "done" or a blank line, break out of the loop

    # If the user has entered a number, check if it's not zero

        # If the number is not zero, multiply it with the product

        # If the number is zero, print an error message

# Print the product
```

```python
# Initialize the product to 1
product = 1

# Use a while loop to continue asking for numbers until the user enters "done" or
a blank line
while True:
    # Ask the user for a number or "done"
    user_input = input("Enter a number (or 'done' to end the program): ")

    # Check if the user has entered "done" or a blank line
    if user_input.lower() == "done" or len(user_input) < 1:
        # If the user has entered "done" or a blank line, break out of the loop
        break

    # If the user has entered a number, check if it's not zero
    num = float(user_input)
    if num != 0:
        # If the number is not zero, multiply it with the product
        product *= num
    else:
        # If the number is zero, print an error message
        print("Error: 0 is ignored.")

# Print the product
print("The product of the numbers is:", product)
```

5.قم بعمل برنامج يقوم بحساب متوسط ثاني أكبر رقم وثاني أصغر رقم يقبل القسمة على 5 و 7 بين الأرقام 452 و 983

Make a program that calculate the average of the second highest and second lowest numbers that are between 452 and 983 and are divisible by 5 and 7.

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```
# Initialize the list to store the numbers that are between 452 and
983 and are divisible by 5 and 7

# Use a while loop to iterate through the range of numbers


# Sort the list of numbers


# Get the second highest and second lowest numbers


# Calculate the average of the second highest and second lowest numbers


# Print the result
```

```python
# Initialize the list to store the numbers that are between 452 and
983 and are divisible by 5 and 7
numbers = []

num = 452
# Use a while loop to iterate through the range of numbers
while num < 983:
    if num % 5 == 0 and num % 7 == 0:
        numbers.append(num)
    num += 1

# Sort the list of numbers
numbers.sort()

# Get the second highest and second lowest numbers
second_highest = numbers[-2]
second_lowest = numbers[1]

# Calculate the average of the second highest and second lowest numbers
average = (second_highest + second_lowest) / 2

# Print the result
print(f"The average of the second highest ({second_highest}) and second lowest
({second_lowest}) numbers is: {average}")
```

{//}

6. قم بإصلاح الخطأ في الأكواد التالية

Debug the following code.

```
# A)

while True:
    # initialize the total to 0
    total = 0

    # Ask for a number
    number = input("Enter a number: ")

    # If the user enters "done", or pressed Enter key then break out of the loop
    if number == "done" or len(number) > 1:
        continue

    # SUM ODD NUMBERS
    if number%2 != 0:
        continue
    total = total + number

print(f"The total is: {total}")
```

{//}

```
# A)  # >>>> Answers

while True:
    # initialize the total to 0
    total = 0  # >>>> Initialize the total outside the loop

    # Ask for a number
    number = input("Enter a number: ")

    # If the user enters "done", or pressed Enter key then break out of the loop
    if number == "done" or len(number) > 1:   # >>>> Change this line to less
than 1
        continue  # >>>> Change this line to break

    # SUM ODD NUMBERS
    if number%2 != 0:  # >>>> Change this line to sum ODD numbers
        continue
    total = total + number

# Print the total
print(f"The total is: {total}")
```

```python
# B)

total = 0
# Always ask for a number
while False:
    # Ask for a number
    number = int(input("Enter a number: "))

    # If the user enters "done", or pressed Enter key then break out of the loop
    if number != "done" or len(number) < 1:
        continue

    # SUM NUMBERS DIVISIBLE BY 3
    if number%3 == 0:
        continue
    number = total + number

# Print the total
print(f"The total is: {total}")
```

```
# B)   # >>>> Answers

total = 0
# Always ask for a number
while False:  # >>>> Change this line to True
    # Ask for a number
    number = int(input("Enter a number: "))  # >>>> Change this line without int

    # If the user enters "done", or pressed Enter key then break out of the loop
    if number != "done" or len(number) < 1:       # >>>> Change this line to ==
"done"
        continue  # >>>> Change this line to break

     # >>>> Change data type to float


    # SUM NUMBERS DIVISIBLE BY 3
    if number%3 == 0:    # >>>> Change this line to sum numbers divisible by 3
        continue
    number = total + number   # >>>> Change this line to total = total + number

# Print the total
print(f"The total is: {total}")
```