**while loop exercises along with their answers**

**Exercise 1: Counter**

Question: Write a program that counts from 1 to 10, but skips the number 5.

Answer:

```

count = 1

while count <= 10:

if count == 5:

count += 1

continue

print(count)

count += 1

```

**Exercise 2: Sum of Numbers**

Question: Write a program that keeps asking for numbers until the user enters '0', then outputs the sum of all numbers entered.

Answer:

```

total = 0

while True:

number = int(input("Enter a number (0 to stop): "))

if number == 0:

break

total += number

print("Total sum:", total)

```

**Exercise 3: Positive Number Checker**

Question: Write a program that keeps asking for numbers and stops when a positive number is entered.

Answer:

```

while True:

number = int(input("Enter a number: "))

if number > 0:

print("Positive number entered!")

break

```

**Exercise 4: Odd Number Skipper**

Question: Count from 1 to 20, but skip odd numbers.

Answer:

```

count = 1

while count <= 20:

if count % 2 != 0:

count += 1

continue

print(count)

count += 1

```

**Exercise 5: Password Checker**

Question: Ask the user to enter a password until they enter the correct password (e.g., "123").

Answer:

```

while True:

password = input("Enter your password: ")

if password == "123":

print("Correct password!")

break

else:

print("Wrong password, try again.")

```

**Exercise 6: Multiples of Five**

Question: Write a program to print multiples of 5 starting from 10 up to 50.

Answer:

```

number = 10

while number <= 50:

print(number)

number += 5

```

**Exercise 7: Negative Number Exit**

Question: Continuously ask the user to enter a number and exit the loop if they enter any negative number.

Answer:

```

while True:

number = int(input("Enter a number: "))

if number < 0:

print("Exiting, negative number entered.")

break

```

**Exercise 8: Even Number Printer**

Question: Print even numbers from 2 to 20, but skip the number 10.

Answer:

```

number = 2

while number <= 20:

if number == 10:

number += 2

continue

print(number)

number += 2

```

**Exercise 9: User Interrupt**

Question: Write a loop that continuously prints "Running..." until the user types "stop".

Answer:

```

while True:

command = input("Type 'stop' to stop: ")

if command.lower() == "stop":

break

print("Running...")

```

**Exercise 10: Divisible by Three**

Question: Write a program to print numbers from 1 to 30, but skip numbers that are divisible by 3.

Answer:

```

number = 1

while number <= 30:

if number % 3 == 0:

number += 1

continue

print(number)

number += 1

```