

WHILE LOOP:

1. Print numbers from 1 to 20

```
i = 1
while i <= 20:
    print(i, end=" ")
    i += 1
```

2. Sum of first N natural numbers

```
n = int(input("Enter N: "))
i = 1
sum = 0
while i <= n:
    sum += i
    i += 1
print("Sum =", sum)
```

3. Factorial of a number

```
num = int(input("Enter a number: "))
fact = 1
i = 1
while i <= num:
    fact *= i
    i += 1
print("Factorial =", fact)
```

4. Reverse a number

```
num = int(input("Enter a number: "))
rev = 0
while num > 0:
    digit = num % 10
    rev = rev * 10 + digit
    num //= 10
print("Reversed number:", rev)
```

5. Count digits in a number

```
num = int(input("Enter a number: "))
count = 0
```

```
while num != 0:
    num //= 10
    count += 1
print("Number of digits:", count)
```

6. Print multiplication table

```
num = int(input("Enter number: "))
i = 1
while i <= 10:
    print(num, "x", i, "=", num*i)
    i += 1
```

7. Sum of digits of a number

```
num = int(input("Enter number: "))
sum = 0
while num > 0:
    sum += num % 10
    num //= 10
print("Sum of digits:", sum)
```

8. Check if a number is palindrome

```
num = int(input("Enter number: "))
temp = num
rev = 0
while temp > 0:
    rev = rev*10 + temp%10
    temp //= 10
if num == rev:
    print(num, "is a palindrome")
else:
    print(num, "is not a palindrome")
```