

While loop

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# Assignment 1: Mobile Battery Drain  
# Scenario: A mobile phone battery starts at a given percentage. Every hour, the  
battery drains by 5%. Display the battery level hour by hour until it reaches 0 or below.
```

```
battery = int(input("Enter Initial Battery Percentage: "))  
battery -= 5  
t = 1  
while battery >= 0:  
    print(f'Battery After {t} hour: {battery}%')  
    t += 1  
    battery -= 5  
print("Battery drained")
```

```
# Assignment 2: ATM Cash Withdrawal  
# Scenario: An ATM machine has a certain amount of cash. Each customer withdraws  
₹500. Display remaining cash after each withdrawal until ATM is empty.
```

```
atm = int(input("Enter total cash in ATM: "))  
while atm >= 0:  
    print(f'Remaining Cash: {atm}₹')  
    atm -= 500  
print("ATM Empty")
```

```
# Assignment 3: Online Class Attendance  
# Scenario: An online class starts with 0 students. Students join one by one. Display total  
students until class limit is reached.
```

```
max_student = int(input("Enter Maximum Class Strength: "))  
i = 1  
while max_student >= i:  
    print(f'Student Joined: {i}')  
    i += 1  
print("Class Full")
```

```
# Assignment 4: Daily Water Intake Tracker  
# Scenario: A person drinks 250 ml water every time. Track water intake until the daily  
goal is completed.
```

```
water = int(input("Enter daily water goal in ml: "))  
increment = 250  
while water >= increment:  
    print(f'Water Consumed: {increment}ml')  
    increment += 250  
print("Goal Achieved")
```

```
# Assignment 5: Website Login Attempts
# Scenario: A user has limited login attempts. Each wrong attempt reduces one chance. Display remaining attempts.
```

```
Max_attempts = int(input("Enter Maximum Attempts: "))
Max_attempts -= 1
while Max_attempts >= 0:
    print(f'Attempts Left: {Max_attempts}')
    Max_attempts -= 1
print("Account Locked")
```

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# Assignment 6: Elevator Floor Counter
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# Scenario: An elevator starts at ground floor (0) and goes up one floor at a time until it reaches the destination floor.
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```
floor = int(input("Enter destination floor: "))
destination = 1
while destination <= floor:
    print(f'Current Floor: {destination}')
    destination += 1
print("Reached destination")
```

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# Assignment 7: Monthly Savings Tracker
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# Scenario: A person saves ₹2000 every month. Track savings until the target amount is reached.
```

```
target = int(input("Enter saving target: "))
saving = 2000
while saving <= target:
    print(f'Total Saving: {saving}')
    saving += 2000
print("Target Achieved")
```

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# Assignment 8: Bus Ticket Counter
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# Scenario: A bus has limited seats. One passenger boards at a time. Display remaining seats.
```

```
seats = int(input("Enter Total Seats: "))
seats -= 1
while seats >= 0:
    print(f'Seats Remaining: {seats}')
    seats -= 1
print("Bus Full")
```

```
# Assignment 9: Countdown for Exam  
# Scenario: An exam starts in N seconds. Display countdown until exam begins.
```

```
time = int(input("Enter countdown time: "))  
while time >= 1:  
    print(f'Time Left: {time}')  
    time -= 1  
print("...\\nExam Started")
```

```
# Assignment 10: Shopping Cart Budget  
# Scenario: A person has a fixed budget. Each item costs ₹100. Display remaining budget after each purchase.
```

```
budget = int(input("Enter Shopping budget: "))  
budget -= 100  
while budget >= 0:  
    print(f'Remaining Budget: {budget}')  
    budget -= 100  
print("Budget Exhausted")
```