| Experiment No. 2 |
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| To implement Conditional Statements and Loops in Python |
| Date of Performance: 31/01/2024 |
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**Code:**

print("CONDITIONAL STATEMENTS\n")

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

if a < 10:

if a < 5 and a > 1:

print("The number is between 1 and 5")

elif a > 20 and a < 50:

print("The number is greater than 20 and is less than 50")

else:

print("The number is greater than 50")

# Enter a number: 23

# The number is greater than 20 and is less than 50

print("\nLOOPS\n")

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

print("This is for loop: ")

for i in range(n):

print(i)

print("End of for loop")

print("This is while loop: ")

i = 0

while i < n:

print(i)

i += 1

print("End of while loop")

**Output:**

CONDITIONAL STATEMENTS

Enter a number: 23

The number is greater than 20 and is less than 50

LOOPS

Enter a number: 5

This is for loop:

0

1

2

3

4

End of for loop

This is while loop:

0

1

2

3

4

End of while loop

**Conclusion:**

Conditional Statements (if, elif, else):

if statement: It allows you to execute a block of code only if a certain condition is true.

elif statement: It stands for "else if". It allows you to check multiple conditions after the initial if statement. If the condition for if is False, it checks the condition of the next elif block and executes the block associated with the first elif whose condition is true.

else statement: It executes a block of code if none of the preceding conditions in the if or elif statements are true.

Looping Statements (for, while):

for loop: It iterates over a sequence (such as a list, tuple, string, or range) or any iterable object. The loop runs for each item in the sequence.

while loop: It repeatedly executes a block of code as long as a condition is true.