

lab6.py

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1 #wap program to reverse a number using a while loop
2
3
4 def reverse_number(num):
5     reversed_num = 0
6     while num != 0:
7         remainder = num % 10
8         reversed_num = reversed_num * 10 + remainder
9         num = num // 10
10    return reversed_num
11
12
13 number = int(input("Enter an integer: "))
14
15
16 print("Reversed number =", reverse_number(number))
17
18 #wap program to check whether a number is palinrome or not
19
20 # Function to check if a number is a palindrome
21 def is_palindrome(num):
22     original_num = num
23     reversed_num = 0
24
25     while num > 0:
26         remainder = num % 10
27         reversed_num = reversed_num * 10 + remainder
28         num = num // 10
29
30     return original_num == reversed_num
31
32
33 number = int(input("Enter an integer: "))
34
35
36 if is_palindrome(number):
37     print(f"{number} is a palindrome.")
38 else:
39     print(f"{number} is not a palindrome.")
40
41
42 #wap program finding the factorial of a given number using a while loop
43
44 # Function to calculate factorial using a while loop
45 def factorial(num):
46     result = 1
47     while num > 0:
48         result *= num
49         num -= 1
50     return result
51
```

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52
53 number = int(input("Enter a non-negative integer: "))
54
55
56 if number < 0:
57     print("Factorial is not defined for negative numbers.")
58 else:
59
60     print(f"The factorial of {number} is {factorial(number)}")
61
62
63
```