



Module-2 / Loops-Palindrome Number check.md



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35 lines (31 loc) · 1.1 KB

Preview

Code

Blame

Raw



Loops in Python: Palindrome Number Checker



Aim

To write a Python program that checks whether a given number is a **palindrome** using loops.



Algorithm

1. Get input from the user and assign it to a variable `num`.
2. Assign the value of `num` to a temporary variable `temp`.
3. Initialize a variable `rev` to 0 (used to store the reversed number).
4. Use a `while` loop to reverse the digits:
 - While `temp > 0`:
 - `rev = (10 * rev) + temp % 10`
 - `temp = temp // 10`
5. After the loop, compare `rev` with `num`:
 - If equal, print that the number is a palindrome.
 - Else, print that it is not a palindrome.



Program

```
num=int(input())
rev=0
temp=num
while temp>0:
    rev=(10*rev)+temp%10
```



```
temp//=10
if rev==num:
    print("The given number {} is a Palindrome".format(num))
else:
    print("The given number {} is not a palindrome".format(num))
```

Output

	Input	Expected	Got
✓	121	The given number 121 is a Palindrome	The given number 121 is a Pal:
✓	1234	The given number 1234 is not a palindrome	The given number 1234 is not a

Passed all tests! ✓

Result

Thus, the Python program that checks whether a given number is a palindrome using loops is created successfully.