Content 47

Program to Check a Palindrome Number

1. #include <stdio.h>
2. #include <stdlib.h>
3. int palindrome(int n)
4. {
5. int reversed = 0;
6. int num2=n;     //Below we have used n more times at last it get disturb so i replaced
7. while (n != 0)
8. {
   * 1. reversed = reversed \* 10 + n % 10;
     2. n = n / 10;
9. }
10. printf("\n\nThe reversed number is: %d\n",reversed);
11. if (reversed==num2)
12. {
    * 1. return 0;
13. }
14. else
15. {
    * 1. return 1;
16. }
17. }
18. int main()
19. {   system("cls");
20. int num;
21. printf("\nEnter a number to check it is Palindrome or not: ");
22. scanf("%d", &num);
23. if (palindrome(num) == 0)
24. {
    * 1. printf("\n\nThe Entered number is a Palindrome number\n");
25. }
26. else
27. {
    * 1. printf("It is  not a palindrome number\n");
28. }
29. return 0;
30. }

**Logic From line 8 to 9:** Suppose if I entered a number 123 then;

Calculation Would be;- reversed=0\*10 + 123 %10

reversed = 0+3

reversed = 3.

Now at next line ;- n=123/10 {but here result of two integers is always an Integer}

n=12 [this will be our **new n.** So further calculation is done on this]

**Output:**

Enter a number to check it is Palindrome or not: 121

The reversed number is: 121

The Entered number is a Palindrome number