IT 161_ Lab7

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Experiment: To create a C program to decide if the given integer is a palindrome, using for loop.

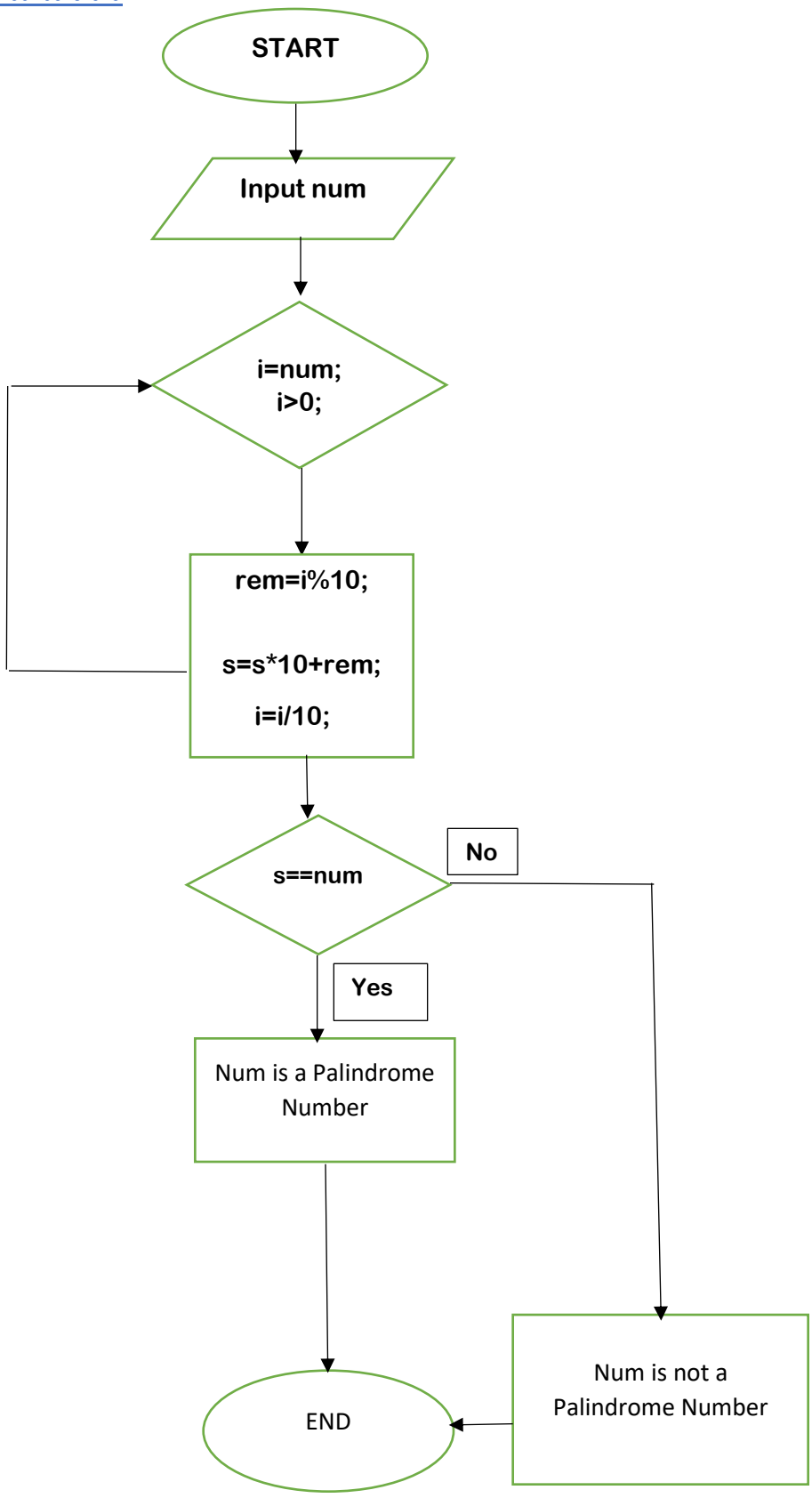
Objective: To create a C program to convert a decimal number to binary number.

Software: Online compiler and debugger for C

Methodology:

1. Declare i,num,rem,s as integer.
2. Take the input num from user.
3. Using a for loop for(i=num;i>0;) perform the tasks 4 to 6.
4. Do i%10 and store the result in rem.
5. Do s%10 and add rem and store the result to s.
6. Divide i by 10.
7. After the loop now , check whether the number entered and reverse number is equal or not .
8. If s==num, then num is a palindrome number.
9. If s!=num, then num is not a palindrome number.

FLOWCHART:


START
Input num
i=num;
i>0;
rem=i%10;
s=s*10+rem;
i=i/10;
s==num
No
Yes
Num is a Palindrome Number
Num is not a Palindrome Number
END

CODE:

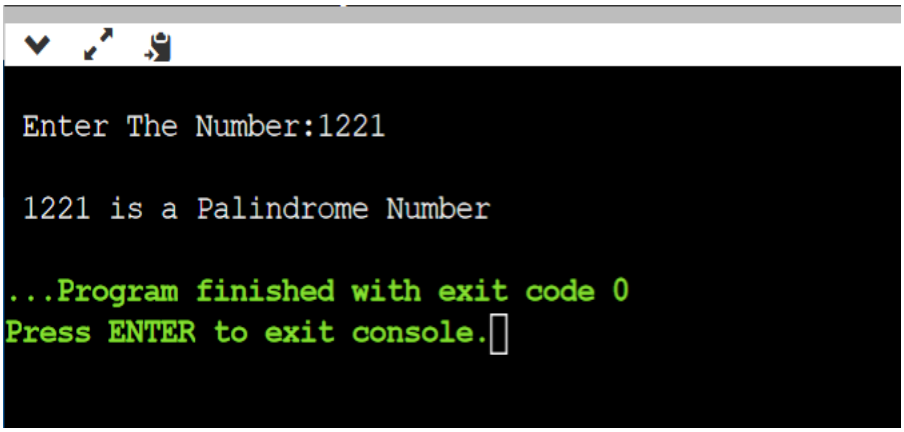
```
#include<stdio.h>
int main()
{
   int i,num,rem,s=0;
   printf("\n Enter The Number:");
   scanf("%d",&num);

   for(i=num;i>0; )
   {
      rem=i%10;
      s=s*10+rem;
      i=i/10;
   }
   if(s==num)
   {
      printf("\n %d is a Palindrome Number",num);
   }
   else
   {
      printf("\n %d is not a Palindrome Number",num);
   }
   return 0;
}
```

RESULT:

Sample1:

Enter the Number: 1221
1221 is a palindrome Number



Sample2:

Enter the number: 1243441
1243441 is not a palindrome number