

Aim: To write a program to show Angstrong, Palindrome ,Reverse ,Sum & product of the number according to the given choice

Source Code:

```
// MENU DIRIVE PROGRAM TO CHECK  AGSTOM, REVERESE PALINDROME
#include <iostream.h>
#include <conio.h>
#include <process.h>
void main()
{
    int ans, n, rep_n,digit,new_num, rev=0 , sum =0,prdo=1;
    char ch;
    clrscr();
    cout <<"=====\\n";
    cout <<"                Harshit Program                \\n";
    cout <<"=====\\n";
    do{
        cout << "(1)    for Arngstrong number \\n";
        cout << "(2)    for REVERSE NUMBER    \\n";
        cout << "(3)    for PALINDROM NUMBER    \\n";
        cout << "(4)    for SUM OF DIGIT    \\n";
        cout << "(5)    for PRODUCT OF DIGIT    \\n";
        cout << "(6)    for EXIT                \\n";
        cout << "Enter Your Choice :";
        cin >> ans;
        if(ans == 1)
        {
            cout<<"\\nEnter the  number \\n";
            cin>>n;
            rep_n = n;
            while (n>0)
            {
                digit = n % 10;
                new_num+=digit * digit * digit;
                n = n /10;
            }
            if(new_num == rep_n)
            {
                cout<<"Armstrong number ";
            }
            else
            {
                cout<<"Not Armstrong number";
            }
        }
        if(ans == 2)
        {
            cout<<"\\nEnter the  number \\n";
            cin>>n;
            while ( n > 0 )
```

```

        {      digit = n % 10;
              rev = rev * 10 + digit ;
              n = n/10;
        }
        cout<<"reverse = "<<rev;
    }
    if(ans == 3)
    {      cout<<"\nEnter the  number \n";
          cin>>n;
          rep_n=n;
          while(n>0)
          {      digit=n%10;
                rev=rev*10+digit;
                n=n/10;
          }
          if(rev == rep_n)
          cout<<"Palindorme ";
          else
          cout<<"Not a palidrome";
    }
    if(ans == 4)
    {      cout<<"\nEnter the  number \n";
          cin>>n;
          while(n>0)
          {      digit=n%10;
                sum+=digit;
                n=n/10;
          }
          cout<<sum<<"=sum of the number";
    }
    if(ans == 5)
    {      cout<<"\nEnter the  number \n";
          cin>>n;
          while(n>0)
          {      digit=n%10;
                prdo*=digit;
                n=n/10;
          }
          cout<<prdo;
    }
    if(ans == 6)
    {      exit(0);
    }
    cout<<"\nDo you want to continue (Y/N) :";
    cin>>ch;
    }while(ch=='Y');
}

```

Output:

```
C:\o\DADDY2.EXE
=====
Harshit Program
=====
(1) for Arngstrong number
(2) for REVERSE NUMBER
(3) for PALINDROM NUMBER
(4) for SUM OF DIGIT
(5) for PRODUCT OF DIGIT
(6) for EXIT
1
Enter the number
12
Not Armstrong number
Do you want to continue <Y/N>
```

```
C:\o\DADDY2.EXE
=====
Harshit Program
=====
(1) for Arngstrong number
(2) for REVERSE NUMBER
(3) for PALINDROM NUMBER
(4) for SUM OF DIGIT
(5) for PRODUCT OF DIGIT
(6) for EXIT
2
Enter the number
234
reverse = 432
Do you want to continue <Y/N>
```

```
C:\Windows\system32\cmd.exe - tc
=====
Harshit Program
=====
(1) for Arngstrong number
(2) for REVERSE NUMBER
(3) for PALINDROM NUMBER
(4) for SUM OF DIGIT
(5) for PRODUCT OF DIGIT
(6) for EXIT
Enter Your Choice :3
Enter the number
123
Not a palidrome
Do you want to continue <Y/N> :
```

```
C:\Windows\system32\cmd.exe - tc
=====
Harshit Program
=====
(1) for Arngstrong number
(2) for REVERSE NUMBER
(3) for PALINDROM NUMBER
(4) for SUM OF DIGIT
(5) for PRODUCT OF DIGIT
(6) for EXIT
Enter Your Choice :4
Enter the number
23
5=sum of the number
Do you want to continue <Y/N> :_
```

```
C:\Windows\system32\cmd.exe - tc
=====
Harshit Program
=====
(1) for Arngstrong number
(2) for REVERSE NUMBER
(3) for PALINDROM NUMBER
(4) for SUM OF DIGIT
(5) for PRODUCT OF DIGIT
(6) for EXIT
Enter Your Choice :5
Enter the number
23
6
Do you want to continue <Y/N> :_
```