

RAHUL KR. MANDAL

ROLL NO: 25

```
1  #include <iostream>
2  #include <conio.h>
3
4  using namespace std;
5
6  int main()
7  {
8      int num, factor = 2;
9      cout << "Enter a number : ";
10     cin >> num;
11
12     for (int i = 2; i <= num / 2; i++)
13     {
14         if (num % i == 0)
15             factor++;
16     }
17
18     if (factor == 2)
19         cout << num << " is prime a number" << endl;
20     else
21         cout << num << " is not prime a number" << endl;
22
23     getch();
24     return 0;
25 }
```

c:\Users\Rahul\Desktop\cpp_program\Assignment\prime.exe

Enter a number : 13
13 is a prime number

c:\Users\Rahul\Desktop\cpp_program\Assignment\prime.exe

Enter a number : 16
16 is not a prime number

```
1  #include <iostream>
2  #include <conio.h>
3
4  using namespace std;
5
6  int main()
7  {
8      int num, temp, lastDigit, sum = 0;
9      cout << "Enter a number : ";
10     cin >> num;
11     temp = num;
12
13     while (num > 0)
14     {
15         lastDigit = num % 10;
16         sum = (sum * 10) + lastDigit;
17         num /= 10;
18     }
19
20     if (temp == sum)
21         cout << temp << " is palindrome number" << endl;
22     else
23         cout << temp << " is not palindrome number" << endl;
24
25     getch();
26     return 0;
27 }
```

c:\Users\Rahul\Desktop\cpp_program\Assignment\palindrome.exe

Enter a number : 12321

12321 is palindrome number

c:\Users\Rahul\Desktop\cpp_program\Assignment\palindrome.exe

Enter a number : 12345

12345 is not palindrome number

```
1  #include <iostream>
2  #include <conio.h>
3  #include <math.h>
4
5  using namespace std;
6
7  int main()
8  {
9      int num, temp, lastDigit, sum = 0;
10     cout << "Enter a number : ";
11     cin >> num;
12     temp = num;
13
14     while (num > 0)
15     {
16         lastDigit = num % 10;
17         sum = sum + pow(lastDigit, 3);
18         num /= 10;
19     }
20
21     if (temp == sum)
22         cout << temp << " is armstrong number" << endl;
23     else
24         cout << temp << " is not a armstrong number " << endl;
25
26     getch();
27     return 0;
28 }
```

c:\Users\Rahul\Desktop\cpp_program\Assignment\armstrong.exe

Enter a number : 370

370 is armstrong number

c:\Users\Rahul\Desktop\cpp_program\Assignment\armstrong.exe

Enter a number : 373

373 is not a armstrong number