

TASK 3

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B. TECH (INFORMATION TECHNOLOGY) – FINAL YEAR

1. Count the number.

PROGRAM:

```
number = int(input("Enter a number: "))  
count = 0  
while number != 0:  
    number //= 10  
    count += 1  
print("The number of digits is:", count)
```

OUTPUT:

Enter a number: 1234

The number of digits is: 4

2. Sum of digits.

PROGRAM:

```
number = int(input("Enter a number: "))  
sum = 0  
while number != 0:  
    sum += number % 10  
    number //= 10  
print("The sum of the digits is: ",sum)
```

OUTPUT:

Enter a number: 12345

The sum of the digits is: 15

3. Armstrong Number.

PROGRAM:

```
number = int(input("Enter a number: "))
num_digits = len(str(number))
sum_of_powers = 0
temp = number
while temp != 0:
    digit = temp % 10
    sum_of_powers += digit ** num_digits
    temp //= 10
if sum_of_powers == number:
    print(number, " is an Armstrong number.")
else:
    print(number, " is not an Armstrong number.")
```

OUTPUT 1:

```
Enter the number: 1234
1234 is not an armstrong number
```

OUTPUT 2:

```
Enter the number: 153
153 is an armstrong number
```