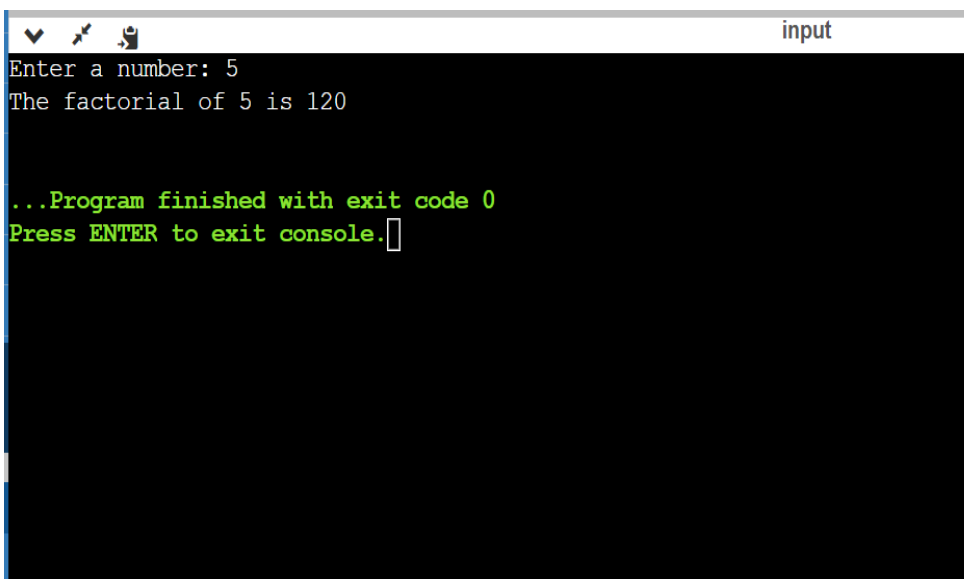


#Name : Tapas Chatterjee ,Roll no: 19

1)Write a program in Python to print the factorial of a number.

```
num = int(input("Enter a number: "))
factorial = 1
if num < 0:
    print(" Factorial does not exist for negative numbers")
elif num == 0:
    print("The factorial of 0 is 1")
else:
    for i in range(1,num + 1):
        factorial = factorial*i
    print("The factorial of",num,"is",factorial)
```

#Output

A screenshot of a terminal window titled 'input'. The window has a dark background with white text. The text shows the program's execution: it prompts 'Enter a number: 5', outputs 'The factorial of 5 is 120', and then displays a green message: '...Program finished with exit code 0' followed by 'Press ENTER to exit console.' with a cursor. The terminal window includes standard icons for window control (minimize, maximize, close) in the top-left corner.

```
input
Enter a number: 5
The factorial of 5 is 120

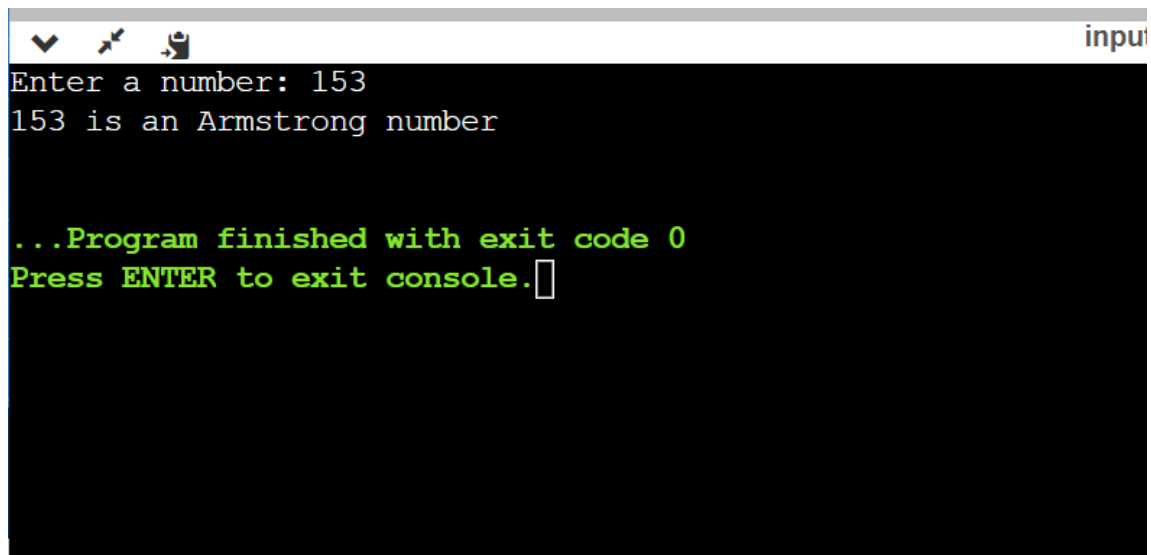
...Program finished with exit code 0
Press ENTER to exit console.
```

2)Write a program in Python to check whether a number is Armstrong or not.

```
num = int(input("Enter a number: "))
sum = 0
temp = num
while temp > 0:
    digit = temp % 10
    sum += digit ** 3
    temp //= 10

if num == sum:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an Armstrong number")
```

#Output

A screenshot of a Python console window. The window has a title bar with standard OS icons and the text 'input'. The console output shows the program's execution: it prompts 'Enter a number: 153', then outputs '153 is an Armstrong number'. Below this, it shows the program's completion: '...Program finished with exit code 0' and 'Press ENTER to exit console.' with a cursor at the end of the line.

```
input
Enter a number: 153
153 is an Armstrong number

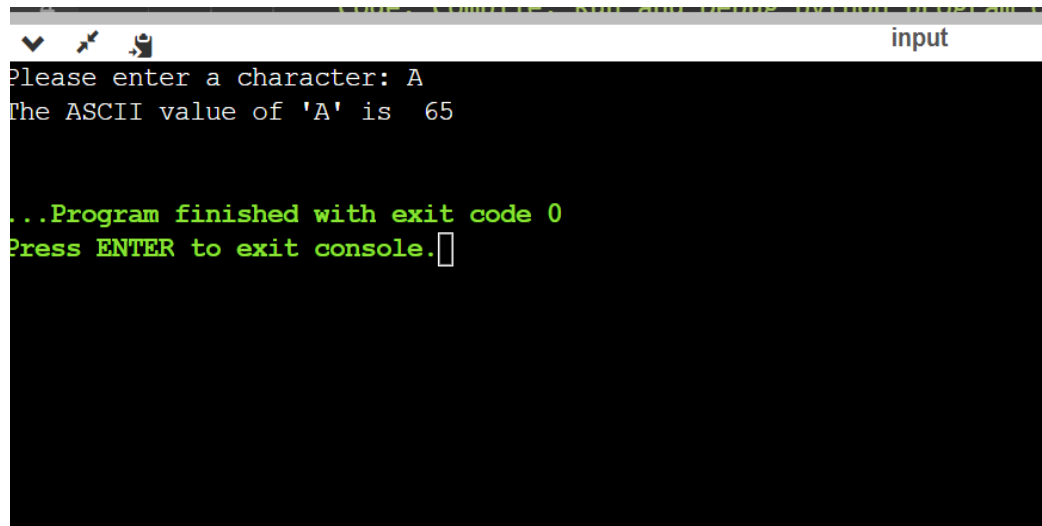
...Program finished with exit code 0
Press ENTER to exit console.█
```

3)Write a program in Python to print ASCII value of a character.

```
K = input("Please enter a character: ")
```

```
print ("The ASCII value of '" + K + "' is ", ord(K))
```

#Output

A screenshot of a Python console window. The window has a title bar with standard icons and the word 'input' on the right. The console shows the following text: 'Please enter a character: A', 'The ASCII value of 'A' is 65', and a green prompt '...Program finished with exit code 0' followed by 'Press ENTER to exit console.' with a cursor.

```
input
Please enter a character: A
The ASCII value of 'A' is 65

...Program finished with exit code 0
Press ENTER to exit console.
```

4)Write a program in Python to find area of a circle.

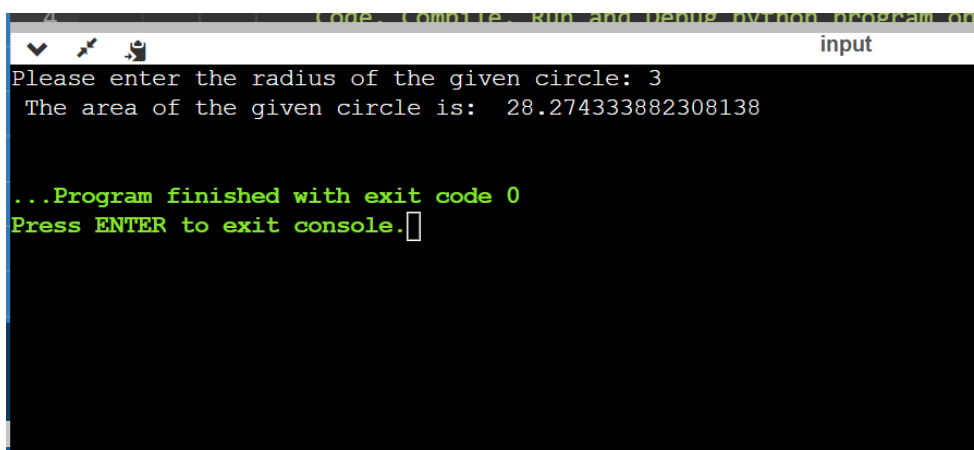
```
import math as M
```

```
Radius = float (input ("Please enter the radius of the given circle: "))
```

```
area_of_the_circle = M.pi* Radius * Radius
```

```
print (" The area of the given circle is: ", area_of_the_circle)
```

#Output

A screenshot of a Python console window. The window has a title bar with standard icons and the word 'input' on the right. The console shows the following text: 'Please enter the radius of the given circle: 3', 'The area of the given circle is: 28.274333882308138', and a green prompt '...Program finished with exit code 0' followed by 'Press ENTER to exit console.' with a cursor.

```
input
Please enter the radius of the given circle: 3
The area of the given circle is: 28.274333882308138

...Program finished with exit code 0
Press ENTER to exit console.
```

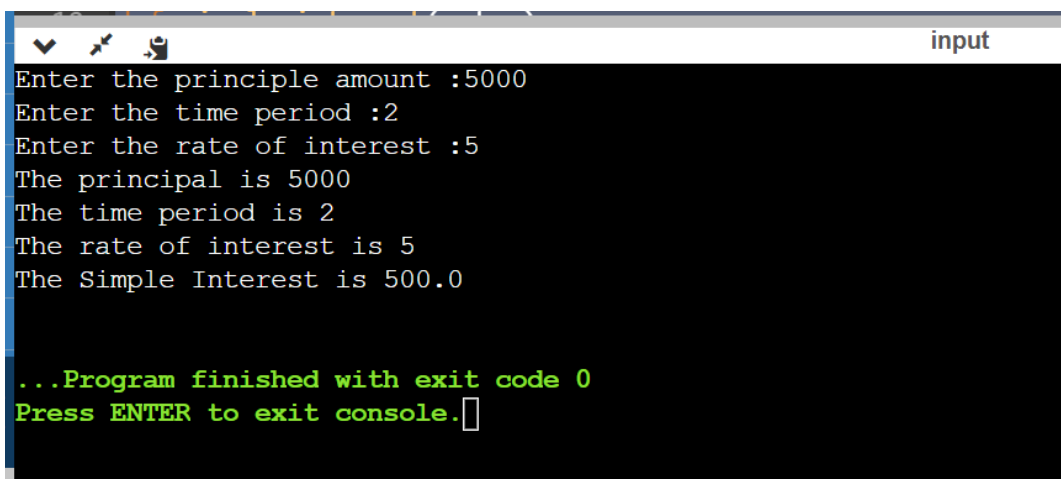
5)Write a program in Python to find simple interest.

```
def simple__interest(p,t,r):  
    print('The principal is', p)  
    print('The time period is', t)  
    print('The rate of interest is',r)  
  
    si = (p * t * r)/100  
  
    print('The Simple Interest is', si)
```

Driver code

```
P = int(input("Enter the principle amount :"))  
T = int(input("Enter the time period :"))  
R = int(input("Enter the rate of interest :"))  
simple__interest(P,T,R)
```

#Output

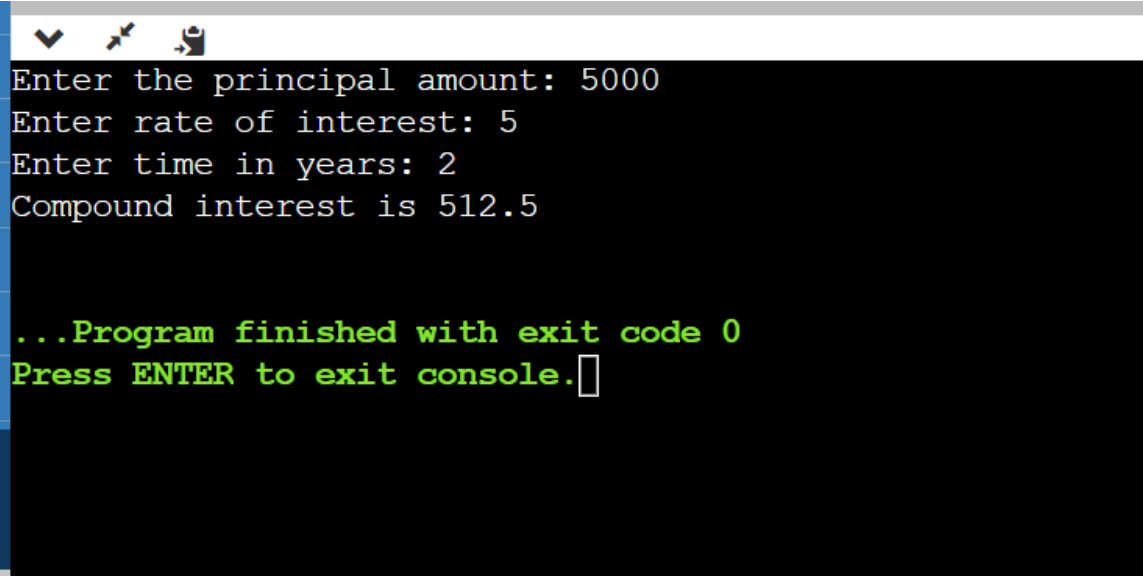
A screenshot of a Python console window titled 'input'. The window has a dark background with light-colored text. The text shows the program's execution: it prompts for the principal amount (5000), time period (2), and rate of interest (5). It then prints the principal (5000), time period (2), rate of interest (5), and the simple interest (500.0). At the end, it shows the program finished with exit code 0 and prompts the user to press ENTER to exit the console.

```
Enter the principle amount :5000  
Enter the time period :2  
Enter the rate of interest :5  
The principal is 5000  
The time period is 2  
The rate of interest is 5  
The Simple Interest is 500.0  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```

6)Write a program in Python to find compound interest.

```
def compound_interest(principal, rate, time):  
    Amount = principal * (pow((1 + rate / 100), time))  
    CI = Amount - principal  
    print("Compound interest is", CI)  
  
principal = int(input("Enter the principal amount: "))  
rate = int(input("Enter rate of interest: "))  
time = int(input("Enter time in years: " ))  
  
compound_interest(principal,rate,time)
```

#Output



```
Enter the principal amount: 5000  
Enter rate of interest: 5  
Enter time in years: 2  
Compound interest is 512.5  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```