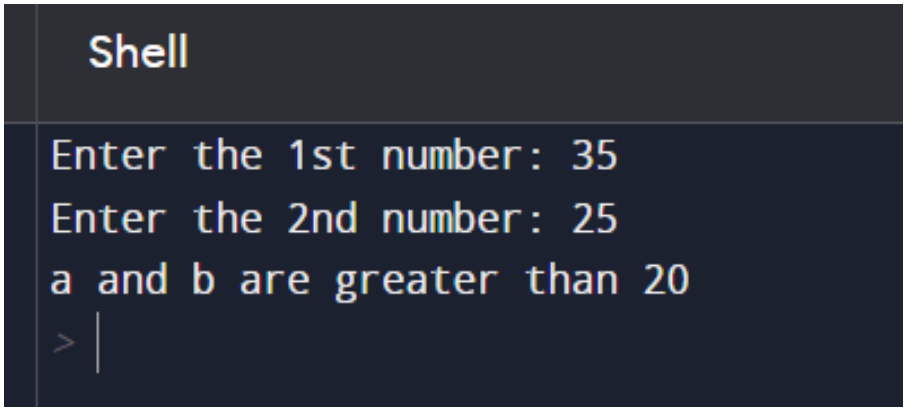
Practice Set 2

Q1 write a program to apply Logical AND operator on Two operands.

Ans –

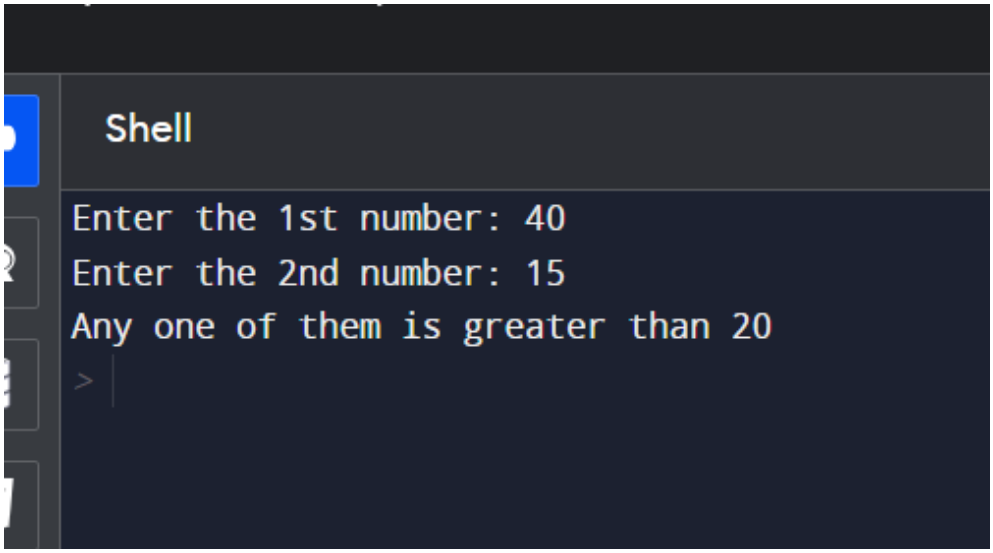
```
a = int(input("Enter the 1st number: "))
b = int(input("Enter the 2nd number: "))
if a > 20 and b > 20:
    print("a and b are greater than 20")
else:
    print("Either a or b is incorrect Or None of them is Correct")
```



2. Write a program to apply Logical OR operator on two operands.

Ans –

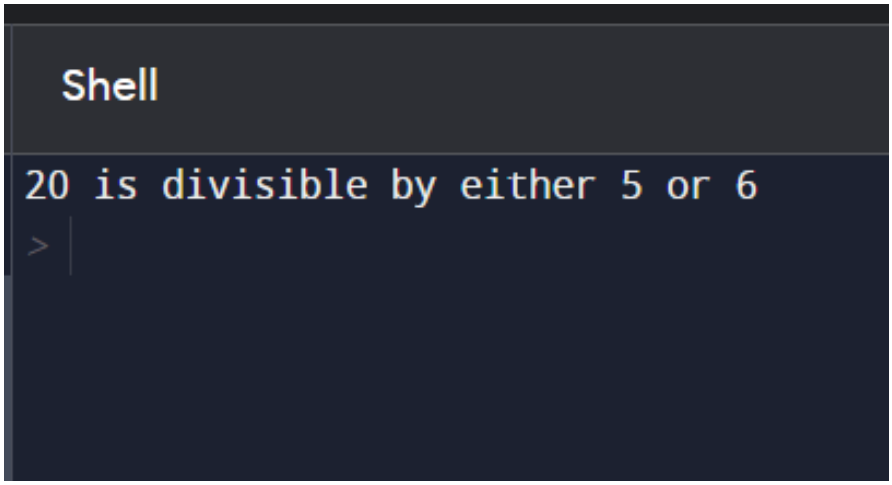
```
a = int(input("Enter the 1st number: "))
b = int(input("Enter the 2nd number: "))
if a > 20 or b > 20:
    print("Any of them is greater than 20")
else:
    print("No one is greater than 20")
```



3. Write a program to apply Logical NOT operator on an operand.

Ans –

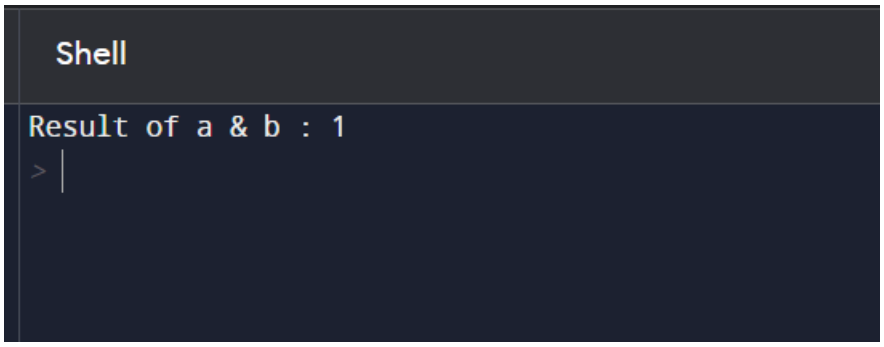
```
a = 20
if not a:
    print("Bool value of a is True")


if not(a % 3==0 or a%5==0):
    print("20 is not divisible by either 5 or 6")
else:
    print("20 is divisible by either 5 or 6")
```



4. Write a program to perform Bitwise AND operation on a = 15 and b = 17.

Ans –

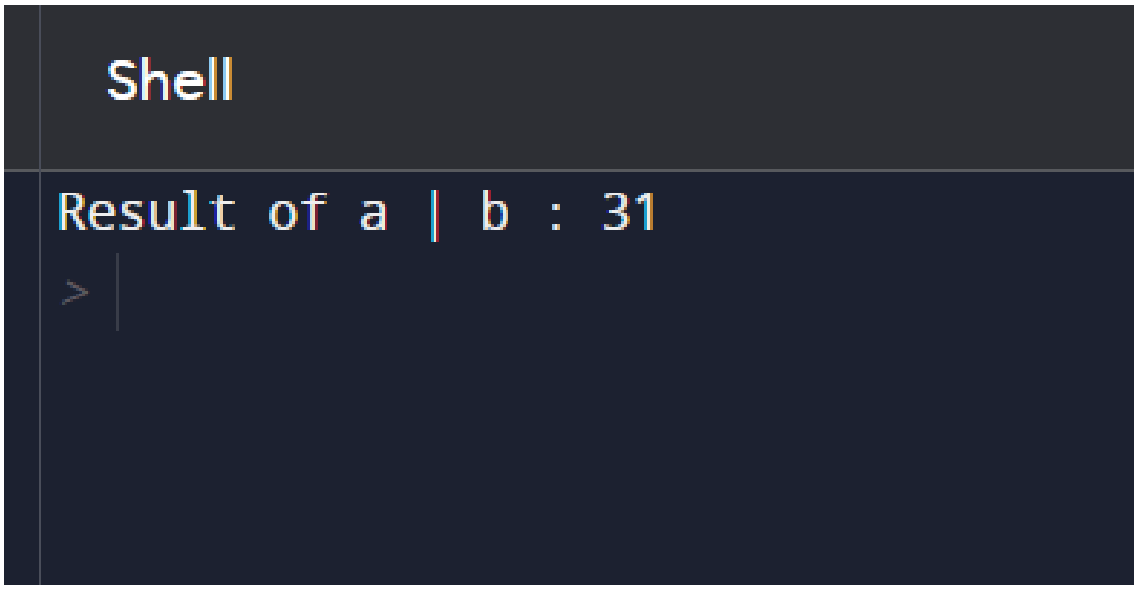
```
a = 15
b = 17
result = a & b
print("Result of a & b :", result)
```



5. Write a program to perform Bitwise OR operation on a = 15 and b = 17.

Ans -

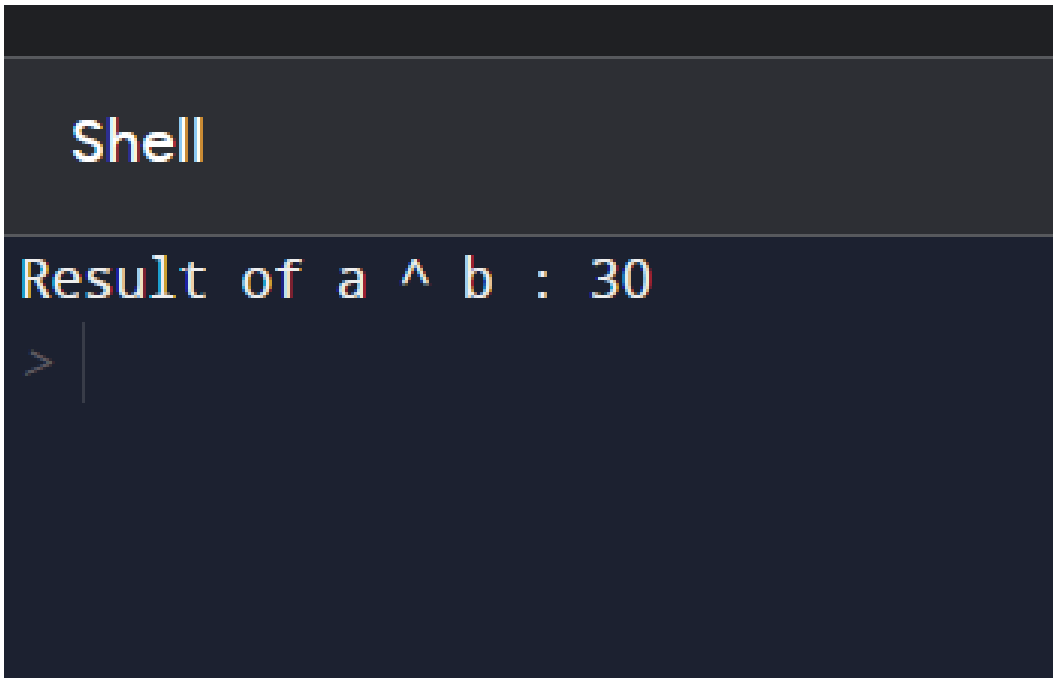
```
a = 15
b = 17
result = a | b
print("Result of a | b :", result)
```



6. Write a program to perform Bitwise XOR operation on a = 15 and b = 17.

Ans –

```
a = 15
b = 17
result = a ^ b
print("Result of a ^ b :", result)
```

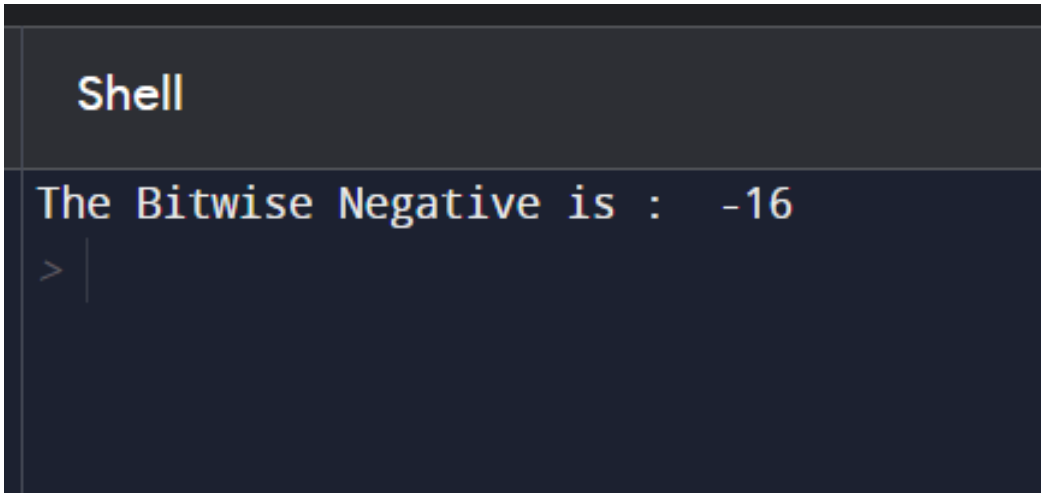


7. Write a program to perform Bitwise negation operation on a = 15.

Ans –

a = 15

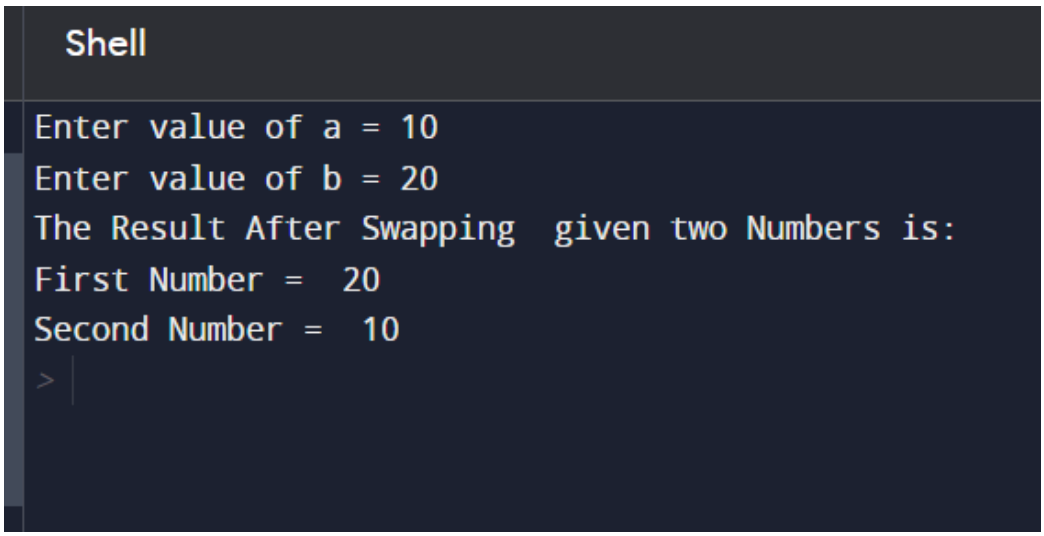
print ("The Bitwise Negative is : ", ~a)

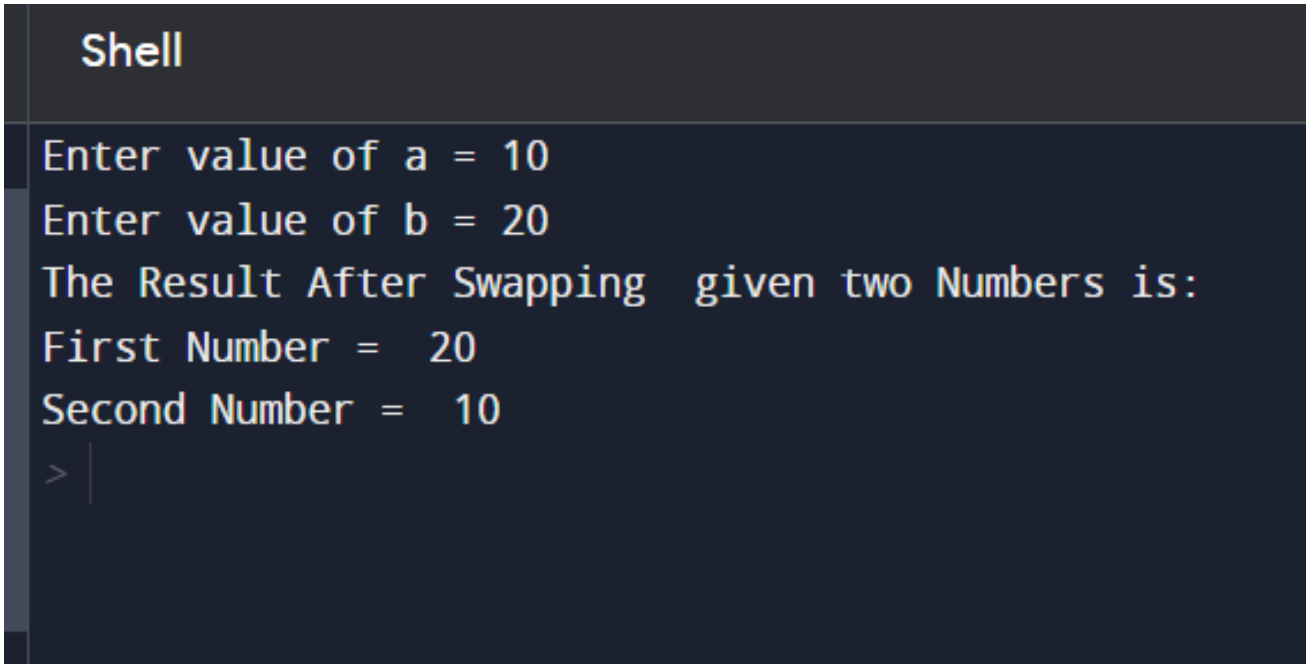


8. Write a program to Swap the Contents of two Numbers using Bitwise XOR Operation.

Ans –

```
a = int(input("Enter value of a = "))
b = int(input("Enter value of b = "))
a = a ^ b
b = a ^ b
a = a ^ b
print("The Result After Swapping  given two Numbers is:")
print("First Number = ", a)
print("Second Number = ", b)
```




Shell
Enter value of a = 10
Enter value of b = 20
The Result After Swapping given two Numbers is:
First Number = 20
Second Number = 10
>