

## Experiment 2

## Code:

```
def XOR (a, b):
```

```
    if a != b:
```

```
        return 1
```

```
    else:
```

```
        return 0
```

```
# Driver code
```

```
if __name__=='__main__':
```

```
    print(XOR(5, 5))
```

```
    print("+-----+-----+")
```

```
    print(" | XOR Truth Table | Result |")
```

```
    print(" A = False, B = False | A XOR B =",XOR(False,False)," | ")
```

```
    print(" A = False, B = True | A XOR B =",XOR(False,True)," | ")
```

```
    print(" A = True, B = False | A XOR B =",XOR(True,False)," | ")
```

```
    print(" A = True, B = True | A XOR B =",XOR(True,True)," | ")
```

## Output:

The screenshot shows the OnlineGDB IDE interface. The code editor contains the XOR function and driver code. The output console shows the execution results, which are the XOR truth table and the result for XOR(5, 5).

```

1
2
3 def XOR (a, b):
4     if a != b:
5         return 1
6     else:
7         return 0
8
9 # Driver code
10 if __name__=='__main__':
11     print(XOR(5, 5))
12
13
14 print("+-----+-----+")
15 print(" | XOR Truth Table | Result |")
16 print(" A = False, B = False | A XOR B =",XOR(False,False)," | ")
17 print(" A = False, B = True | A XOR B =",XOR(False,True)," | ")
18 print(" A = True, B = False | A XOR B =",XOR(True,False)," | ")
19 print(" A = True, B = True | A XOR B =",XOR(True,True)," | ")
20

```

```

A = False, B = False | A XOR B = 0 |
A = False, B = True | A XOR B = 1 |
A = True, B = False | A XOR B = 1 |
A = True, B = True | A XOR B = 0 |

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

```