Program 1

Implement the propositional basic logic gates along with implies and biconditional

def main():

a=False

b=True

print("not operation of a= ",not(a))

print("or operation of a and b= ",(a or b))

print("and operation of a and b= ", (a and b))

print("xor operation of a and b= ", (a ^ b))

print("xnor operation of a and b= ", not(a ^ b))

print("implication of a and b= ", imp(a,b))

print("Bidirectional operation of a and b= ",bidir(a,b))

def imp(a,b):

return (not(a)) or b

def bidir(a,b):

return (imp(a,b) and imp(b,a))

if \_\_name\_\_ == '\_\_main\_\_':

main()