Given an array of N binary strings. We first compute the AND operation of the first two binary strings and then perform this “Result” with the third binary string and so on till the last binary string.

def makeEqualLength(a, b):

len\_a = len(a)

len\_b = len(b)

num\_zeros = abs(len\_a - len\_b)

if (len\_a < len\_b):

for i in range(num\_zeros):

a = '0' + a

return len\_b, a, b

else:

for i in range(num\_zeros):

b = '0' + b

return len\_a, a, b

def andOperationBitwise(s1, s2)

length, s1, s2 = makeEqualLength(s1, s2)

res = "

for i in range(length):

res = res + str(int(s1[i]) & int(s2[i]))

return res

arr = ["101", "110110", "111"]

n = len(arr)

if (n < 2):

print(arr[n - 1])

else:

result = arr[0]

for i in range(n):

result = andOperationBitwise(result, arr[i]);

print(result)

*Input: arr[] = {“101”, “110110”, “111”}*

*Output: 000100*

*Explanation: (000101) & (110110) & (000111) = 000100*