

```
def bit_strings(n):
    if n == 0:
        return []
    if n == 1:
        return ['0', '1']
    return [digit + bitstring for digit in bit_strings(1) for bitstring in
            bit_strings(n-1)]

print(bit_strings(2))
```

bit\_strings(2)  $\Rightarrow$  (n=2)

$\Leftarrow$  Main call

digit = '0' or '1'

bit\_strings(1)

bit\_strings(1)

$\Leftarrow$  Recursive call

'0'  $\rightarrow$  '1'

'0'  $\rightarrow$  '1'

'00'

'01'

'10'

'11'

O/P  $\Rightarrow$  ['00', '01', '10', '11']