**Converting 15 to binary:**

15 / 2 = 7 remainder 1

7 / 2 = 3 remainder 1

3 / 2 = 1 remainder 1

1 / 2 = 0 remainder 1

Reading the remainders from bottom to top gives us the binary representation of 15: 1111.

**Converting 32 to binary:**

32 / 2 = 16 remainder 0

16 / 2 = 8 remainder 0

8 / 2 = 4 remainder 0

4 / 2 = 2 remainder 0

2 / 2 = 1 remainder 0

1 / 2 = 0 remainder 1

Reading the remainders from bottom to top gives us the binary representation of 32: 100000.

**Converting 117 to binary:**

117 / 2 = 58 remainder 1

58 / 2 = 29 remainder 0

29 / 2 = 14 remainder 1

14 / 2 = 7 remainder 0

7 / 2 = 3 remainder 1

3 / 2 = 1 remainder 1

1 / 2 = 0 remainder 1

Reading the remainders from bottom to top gives us the binary representation of 117: 1110101.

**Converting 255 to binary:**

255 / 2 = 127 remainder 1

127 / 2 = 63 remainder 1

63 / 2 = 31 remainder 1

31 / 2 = 15 remainder 1

15 / 2 = 7 remainder 1

7 / 2 = 3 remainder 1

3 / 2 = 1 remainder 1

1 / 2 = 0 remainder 1

Reading the remainders from bottom to top gives us the binary representation of 255: 11111111.

**Converting 946 to binary:**

946 / 2 = 473 remainder 0

473 / 2 = 236 remainder 1

236 / 2 = 118 remainder 0

118 / 2 = 59 remainder 0

59 / 2 = 29 remainder 1

29 / 2 = 14 remainder 1

14 / 2 = 7 remainder 0

7 / 2 = 3 remainder 1

3 / 2 = 1 remainder 1

1 / 2 = 0 remainder 1

Reading the remainders from bottom to top gives us the binary representation of 946: 1110110010. Since this number has more than 8 bits (the maximum number of bits for a byte), we can split it into two bytes as follows: 11101100 10.