input = “apple” (Translate each character into its ASCII code in binary)

```
00000000 00000000
01100001 01110000
01110000 01101100
```

initial value
(block size 2)

Step 1:
```
01100001 01110000
```

Step 2:
```
00010001 00011100
```

ASCII
- ‘a’ = 97 = 01100001
- ‘p’ = 112 = 01110000
- ‘l’ = 108 = 01101100
- ‘e’ = 101 = 01100101

Notice that when the number of bytes in the input is not evenly divisible by the block size, we just stop when we reach the end of the input.