- 1
- CAB
- 434142
- 69
- 71 which is the ASCII value of G then we minus 71 by 2 which gives as 69 and what we know from the previous question 69 in ASCII is E
- 63
- TERRIBLE CODE USE THIS AND IT WILL WORK AND LOOK BETTER
```python
x = int(input("Input a int for x: "))
y = int(input("Input a int for y: "))

sum = x + y

print("sum:", sum)
```
- 01001100

- 76 is 55 and 54 so in binary it is
    - 00110111
    - 00110110

- When you send data if you use something like ASCII the computer needs to get that data and convert it to binary. But if you send your data in binary the computer does not need to convert anything this gives a small speed increase (the increase is so small though that most of the time stuff like api's will send JSON or if they are older xml)

- Basic ASCII does not have enough bits to deal with languages with large character sets. Even when you get to 8-bit extend ascii we still can not represent all the symbols in languages such as Mandarin.

- To overcome these limitations we don't use ASCII much now. We use Unicode for characters but as Unicode does not have a encoding we use UTF-8 to encode it then that UTF-8 becomes binary and you can take that binary to UTF-8 and to decode it you just need tot take the binary convert it to it's raw data (UTF-8) and then take that UTF-8 data and convert it to Unicode.