## Week 1 Exercises

- Q1: Turn 1111 (binary) into decimal number.
- Q2: Turn 29 (decimal) into binary number.
- Q3: Write down the truth tables for AND, OR and XOR gates.
- Q4: What makes RAM Random? Why we do we call it that?
- Q5: What does it mean when there is 0x in front of a string?
- **Q6:** What is the difference between 32-bit and 64-bit processors?
- Q7: What is a CPU cache and what is it used for?
- Q8: Which data compression technique can be used for images and media?
- $\bf Q9:$  Write down the odd parity bits for the examples: 00000111, 00010111, 00000000, 111111100
- Q10: What is the difference between checkbyte and parity bit?