Task 2

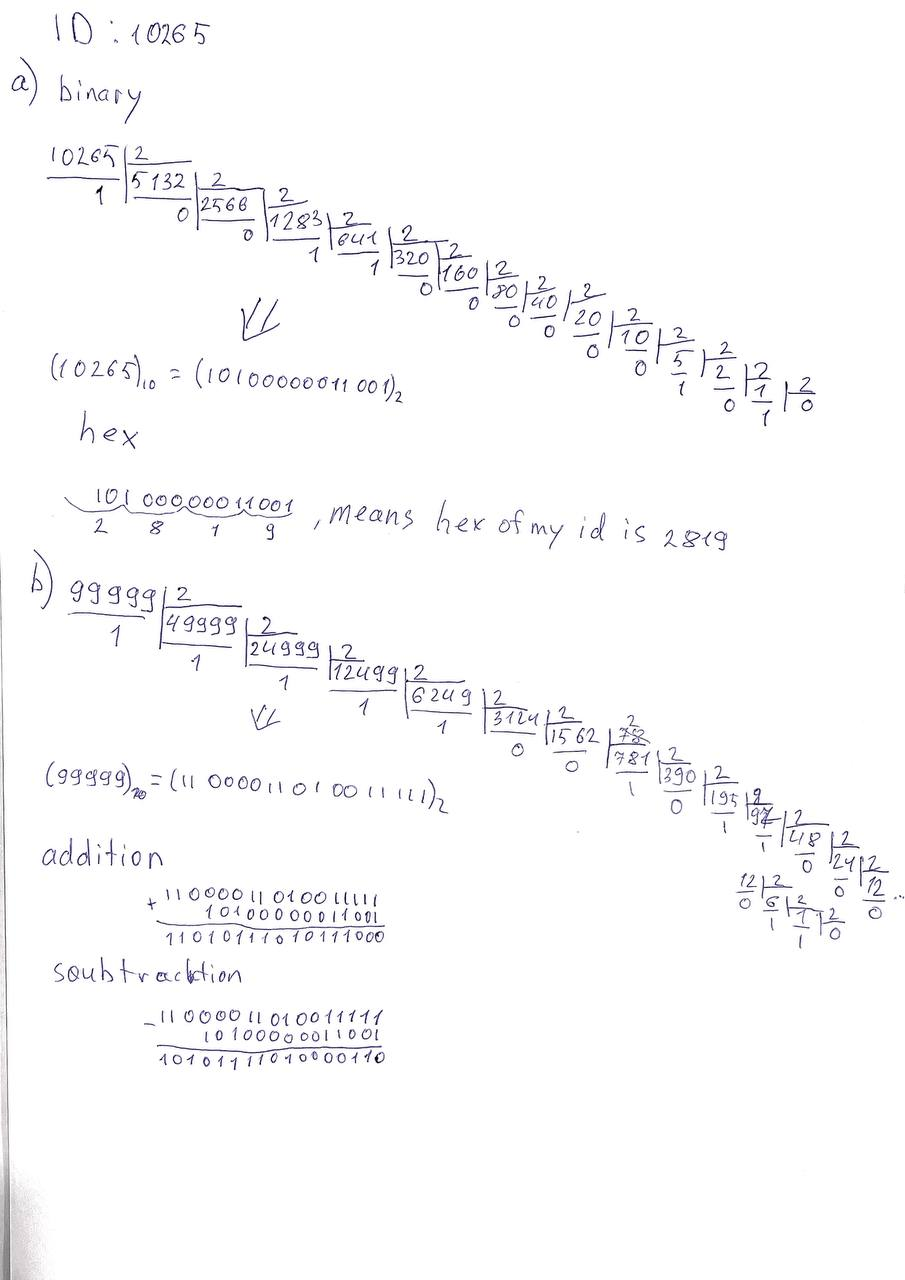
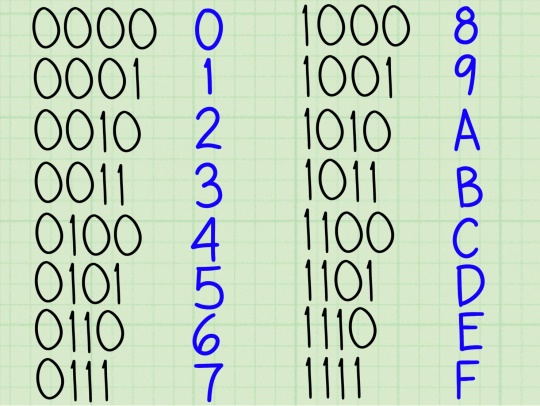
1. My ID is 10265

Binary of my ID is

Using hex-binary table we can find that hex of my id is 2819

Addition => + =

Subtraction => - =



1. Hexadecimal numbers provide better opportunity to use binary numbers in more compact way and therefore are used in Assembly code. In Addition, they represent colors used in HTML and CSS or various symbols in ASCII. They are also used in MAC (Memory Access Control), which is a unique number of a device in the Internet.

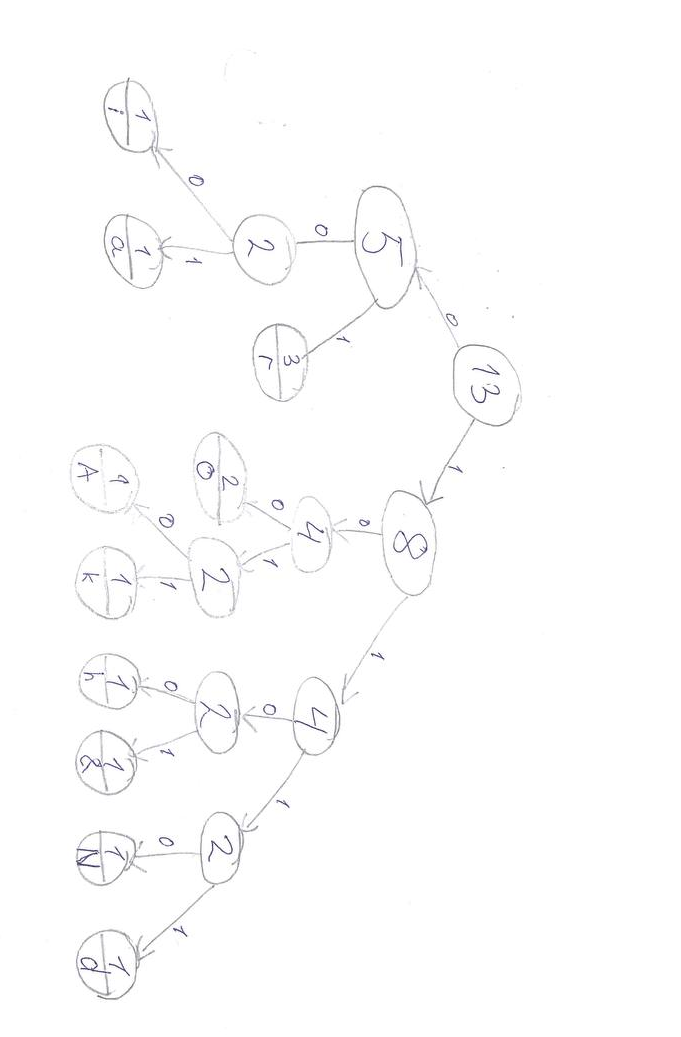
Task 3

Father’s name- Akhror

Mother’s name – Nodira

Sentence – Akhror&Nodira

|  |  |  |  |
| --- | --- | --- | --- |
| Symbols | Frequency | Code | Code length |
| r | 3 | 01 | 2 |
| o | 2 | 100 | 3 |
| i | 1 | 000 | 3 |
| a | 1 | 001 | 3 |
| A | 1 | 1010 | 4 |
| k | 1 | 1011 | 4 |
| h | 1 | 1100 | 4 |
| & | 1 | 1101 | 4 |
| N | 1 | 1110 | 4 |
| d | 1 | 1111 | 4 |



The code is 101010111100011000111011110100111100001001

Code length is sum of frequencies times code lengths = 3\*2+2\*3+3+3+4\*6 = 42 bits