

Lab 03 Tasks

1. Write an uninitialized data declaration for a 16-bit signed integer `val1` and Initialize 8-bit signed integer `val2` with `-11`.
2. Declare a 32-bit signed `val3` and initialize it with the smallest possible negative decimal value.
3. Declare a string variable containing the name of your favourite color. Initialize it as a null terminated string. Initialize 16-bit unsigned integers `A`, `B`, `C`, `D` & `E` with following values `12`, `2`, `13`, `8`, `14`.
4. Convert the following high-level instruction into Assembly Language:
 - `ebx = {(a+b) - (a-b) + c } + d`
 - `a = 11h, b = 10h, c = 30h, d = 40h`
5. Convert the given values of `a`, `b`, `c`, `d` into binary and then use in 8-bit data definition and implement in the equation.
6. Declare an unsigned 16-bit integer variable named `wArray` that uses three initializers.
7. Declare an uninitialized array of `50` unsigned doublewords name `dArray`.
8. Declare a string variable containing the word '`TEST`' repeated `500` times.
9. Declare an array of `20` unsigned bytes named `bArray` and initialize all elements to zero.