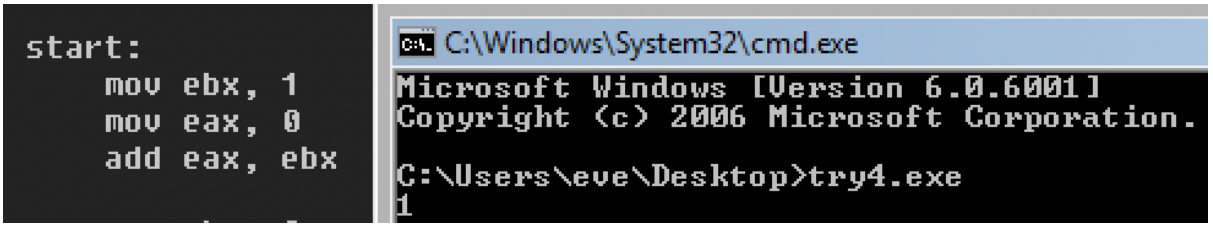
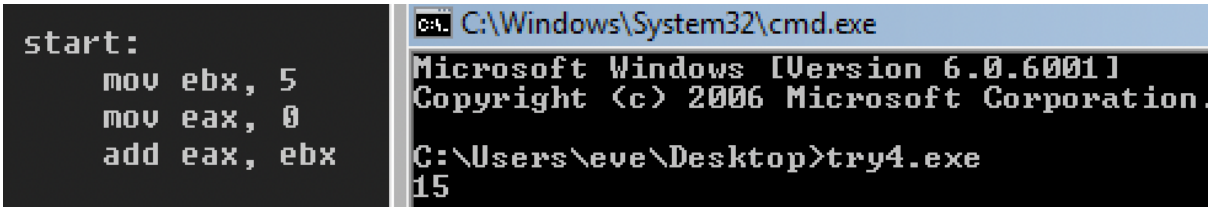
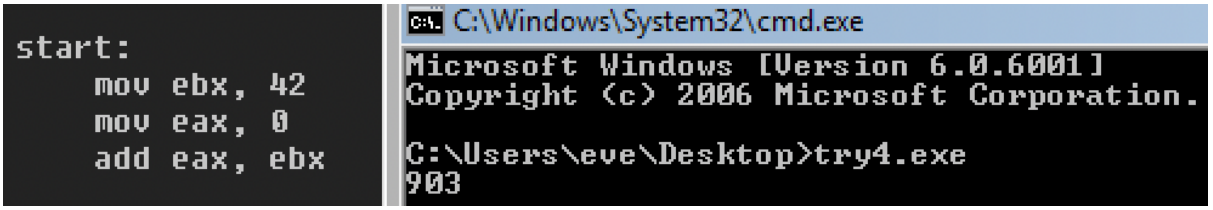
1 Assignment

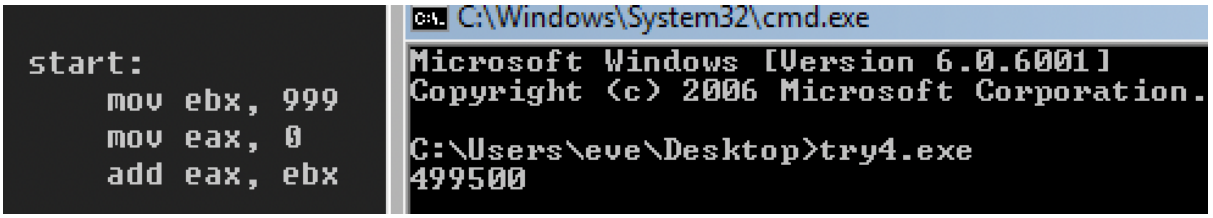
1. Screenshots for Task 1.
The N value is stored in the ebx register. sum(N) is stored in the eax register.
I renamed the submitted .asm files that you can see in the zip folder according to the task number.

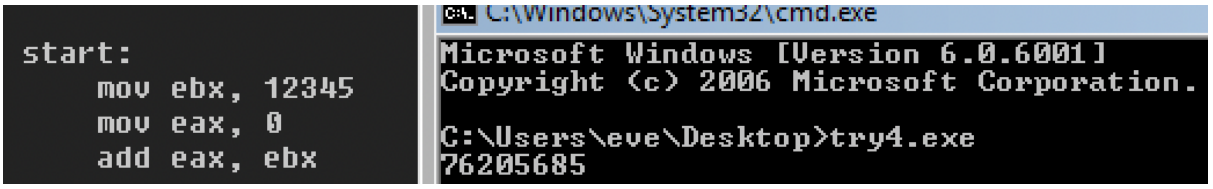
Valid N cases:

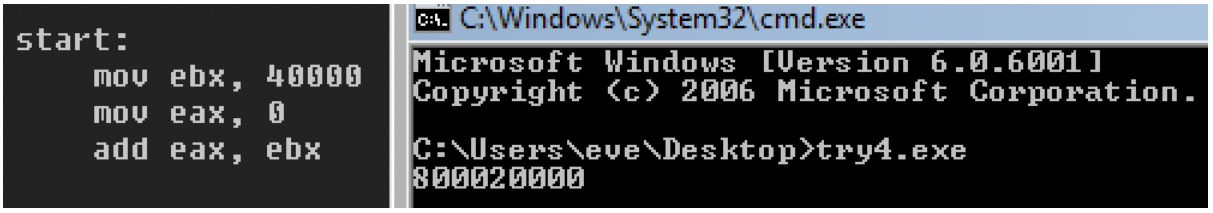


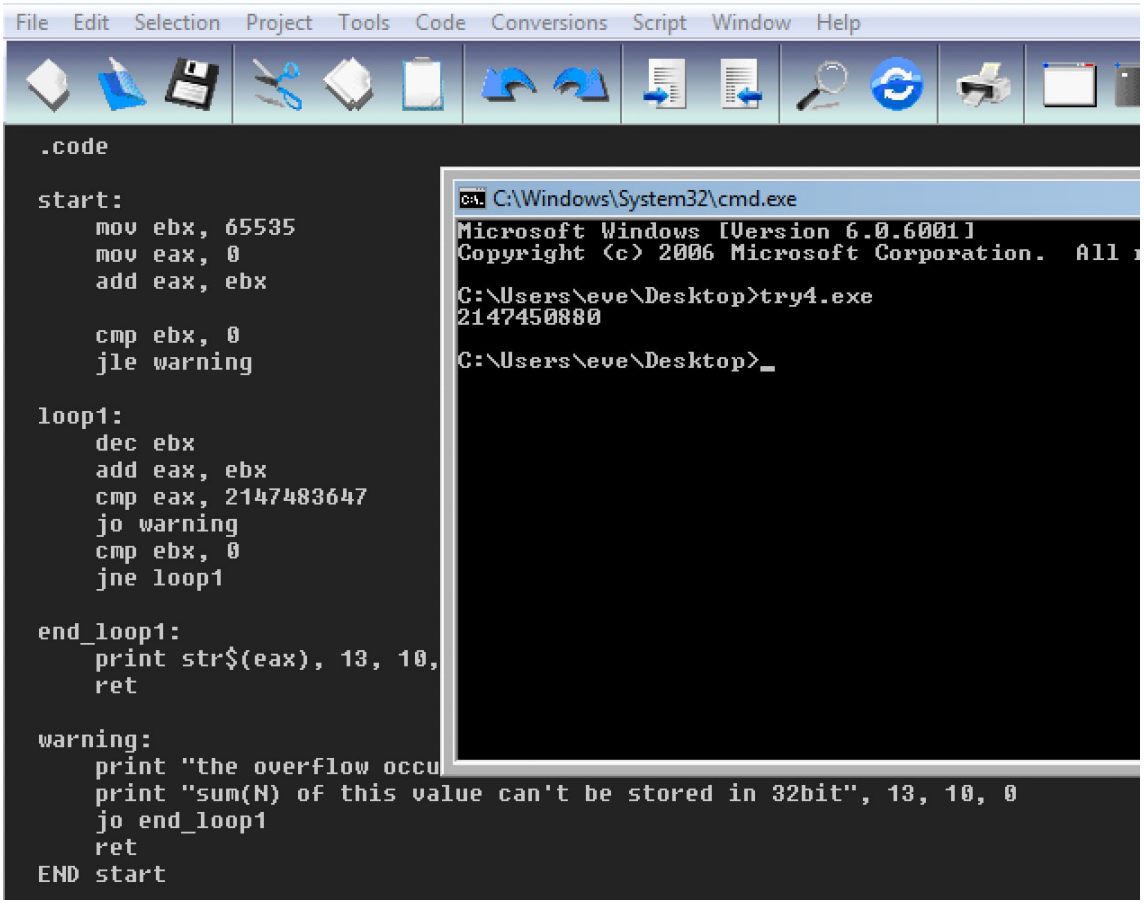




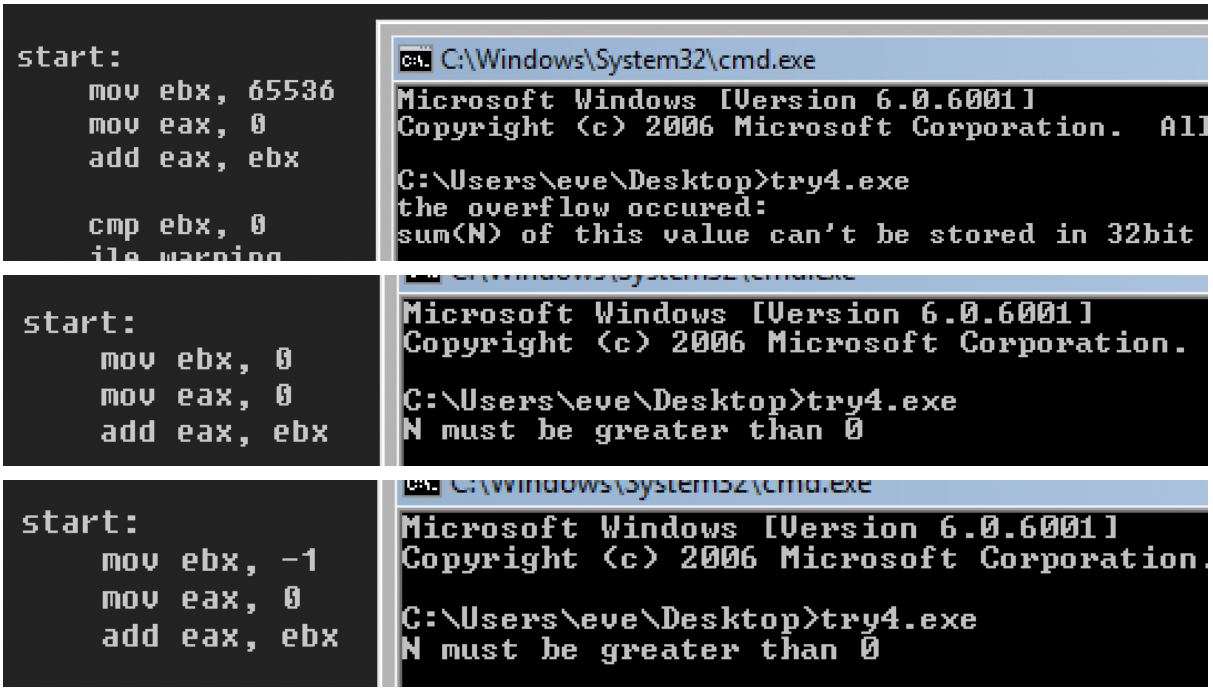




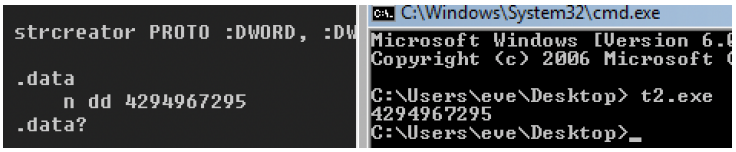


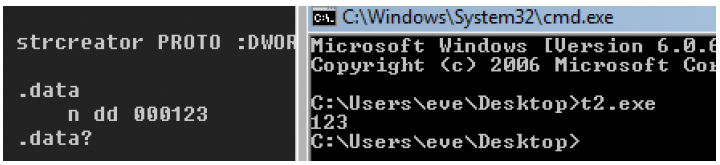


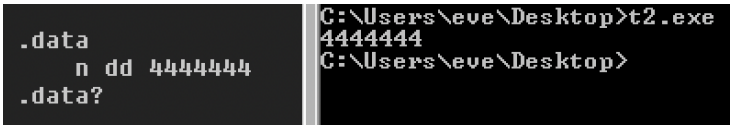
Overflow and invalid N warning cases:

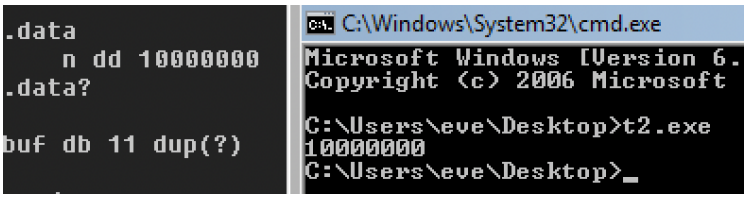


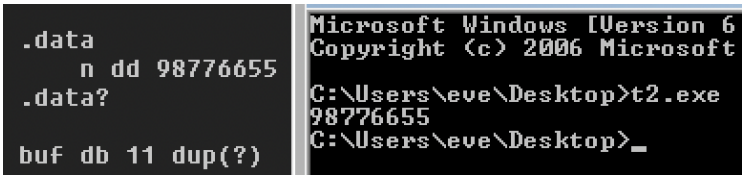
2. Screenshots for Task 2.

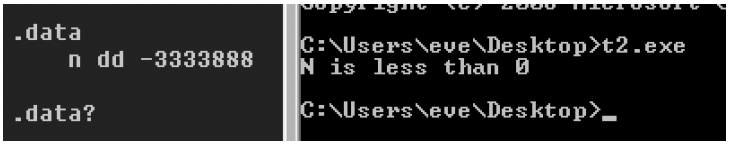


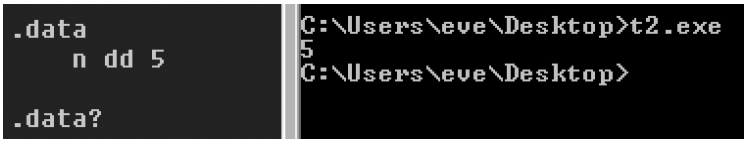












3. CPU, memory & I/O are the three main components of computer architecture. All three elements are connected and need each other to create a proper user experience.

- CPU – central processing unit – is used to process input data from a user and return the output. It processes the data according to code instructions and executes programs.
- Memory is a data storage unit with a limited capacity of data that can be stored (which is expressed in Bytes). Once a user enters data using input devices, the computer system stores this data in its memory unit. Users can also read information from memory, store and edit it. RAM – random-access memory – is a short-term memory where data is stored temporarily, while the processor needs it.
- I/O – input/output – is an umbrella term, unifying all kinds of devices designed either to receive data from the client to the computer (input), and to send the data from the computer to the client (output). It is a set of interfaces which allow clients communication with the computer.