Lab 1

1. Write and run an assembly program (10 marks)

Given that the ADD instruction adds a source operand to a destination operand of the same size. An example of adding two variables, var1 and var2, is shown below.

Both are of DWORD type. Var1 and var2 were assigned 10000h and 20000h, respectively (in hexadecimal representation) and identified in the data part.

Assembly Code

```
.data
Var1 DWORD 10000 h
Var2 DWORD 20000 h

. code
Mov eax,var1
ADD eax,var2
```

Questions

1. What is the final value of the EAX register?
2. What will be different if we decide to add two signed values +3 and -5, create new variables Var3 and Var4 assign these values, test your program and content of EAX registers.
3. Use the callDumpReg function.
4. Write a full assembly program to verify your answer in 1 and 2.