

Q2. (6 pts) Assume the following initial state of the Pentium registers *EAX* and *EBX*:

EAX = 1088CFH and *EBX* = 3F8872H

i. (1 pt) Show the content of *ECX* after executing:

```
movsx ECX, AX
```

ii. (1 pt) Show the content of *ECX* after executing:

```
movzx ECX, AX
```

iii. (4 pts) Show the content of *BX* and the six status flags after executing:

```
add BX, BX
```

Q3. (8 pts) Write a program to ask the user to enter a character in upper case and on the next line print the character in both upper and lower case. Recall that the ASCII codes of 'A' and 'a' are 41H and 61H respectively.