

RECITATION 12

Q1. Define a macro with name MIN to determine the smallest of 2 values. Write a program that tests the macro. For example;

```
The minimum of -9 and 10 = -9
```

Q2. Define a macro TOLOWER(c) that changes c into a small letter if c is a capital letter or leaves c as is otherwise. Write a program that tests the macro. For example;

```
Enter characters, end with 0: A B D c d 0  
  
a b d c d
```

Q3. Define a macro MAX3 that determines the maximum of 3 values. Write a program that tests the macro. For example;

```
The maximum of 20, 10 and -5 = 20
```

Hint: Define a macro MAX2 that determines the maximum of 2 values and use it as follows:

$$MAX3(a, b, c) = MAX2(MAX2(a, b), c)$$

Q4. Define macro's IS_CAPITAL and IS_SMALL that result in a 1 if the character entered is a capital or a small letter respectively. Write a program that tests the macro's. For example;

```
Is A a capital letter? 1  
Is A a small letter? 0
```

Q5. Define a macro IS_LETTER that results in the value 1 if the argument is a letter. Use the macro's from question 4 to define this macro. Write a program that tests the macro's. For example;

```
Is a a letter? 1  
Is * a letter? 0
```