

CS 271 Computer Architecture and Assembly Language

Self-Check for Lecture#5

Solutions are posted

1. Define a MASM constant for your name as a z-byte terminated string.
2. What is the size of the string in the following MASM data segment declaration?

```
.data
stones    BYTE    "You Can't Always Get What You Want.",10,13,0
```

3. Solve each problem using the following data segment:

```
.data
k        DWORD ?
n        DWORD ?
yes     BYTE    "Yes", 0
no      BYTE    "No", 0
maybe  BYTE    "Maybe" ,0
```

Assume that variables have been initialized. Write MASM code to implement the following high-level pseudo-code repetition structures.

3.1.

```
while (k < n){
    print (yes);
    k += 2;
}
```

3.2.

```
do{
    print (maybe);
    k++;
}
while (k < n);
```

3.3.

```
for (k = 10; k > 0; k--){
    print (k);
}
```

3.4.

```
for (k = 10; k <= n; k++){
    print (no);
}
```