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Seminar 8: Intermediate code generation

Exercise 1

Given the follow C code:

```
/******** factorial recursivo ********/
#include <stdio.h>

int m;

int fact(int n) {
    if (n <= 1)
      return 1;
    else
      return n * fact(n-1);
} // fin de fact()

int main(int argn, char* argc[]) {
    int n;
    printf("Teclea un entero\n");
    scanf("%d", &n);
    m = fact(n);
    printf("El factorial de %d = %d\n", n, m);
    return 0;
} // fin de main()
```

Show the assembler program the C code generates

Exercise 2

Given the follow C code:

```
/******** mayor de tres numeros ********/
#include <stdio.h>
int a, b, c;

int main(int argn, char* argc[]) {
    int mayor;
    printf("Teclea tres enteros: ");
    scanf("%d%d%d", &a, &b, &c);
    if (a >= b && a >= c)
       mayor = a;
    else if (b >= a && b >= c)
       mayor = b;
    else
       mayor = c;
    printf("El mayor es %d = %d\n", mayor);
    return 0;
} // fin de main()
```

Show the assembler program the C code generates