

## Lab 4: Recursion

### What to Do

Watch the lab video either on [Panopto](#) or on Youtube.

### Task1:

1. Translate the following C code into a VSCPU ASM.

```
int main() {
    int x = 3;    // x is in 200
    int y = 5;    // y is in 201
    int result = power(x,y); //Save result in 500
}

int power(int base, int exp){ // base should be in 300
    if(exp == 0)              // exp, return_val and return_addr should
        return 1;             // start in 600,601,602
    else                      // Also, the start of the function should be in 400
        return base * power(base, exp-1);
}
```

2. Your filename must be the same as "power.asm".

### Task2:

1. Examine fibonacci\_low.c code.
2. Fill RETURNpt1, RETURNpt2 on the .asm code.
3. Your filename must be the same as "fibonacci.asm".

### Submission

- Submit power.asm and fibonacci.asm files in LMS under the assignment LAB04. Do not zip your files, upload them directly on LMS!