1. Translate the following C code to RISC-V assembly code. Use a minimum number of instructions. Assume that the values of a, b, i, and j are in registers x5, x6, x7, and x29, respectively. Also, assume that register x10 holds the base address of the array D.

for(i=0; i<a; i++)

for(j=0; j<b; j++)

D[4\*j] = i + j;

1. Implement the following C code in RISC-V assembly. Hint:

Remember that the stack pointer must remain aligned on a multiple of 16.

int fib(int n){

if (n==0)

return 0;

else if (n == 1)

return 1;

else

return fib(n−1) + fib(n−2);

}