

Assignment 3

Due 7/24

(1)(programming-based)

Write a function

void fibonacci(int x,int y, int n, vector<int>v) to create a vector :

x, y is the first two element of vector v, n is the number of element, v is an uninitialized vector. The element of v fulfill the condition:

$v[i]=v[i-1]+v[i-2];$

print this vector in your main function.

(2)(programming based)

Use two ways to implement $\text{pow}(x, n)$, which calculates x raised to the power n (x^n).

1st way: Use a for loop

2nd way: use recursive method, read how I implement the function **factorial in lecture 6**

PS: Be careful about boundary condition:

1, the n can be less than or equal to 0

2, the x is a float and can equal to 0