Stacks, Bad Pointers, and Indirect Chains

What are Stacks, Bad Pointers, and Indirect Chains?

Stack:

SP -> 0xFFFFF0

R3=19

push {R3,R4,R5} // shorthand for MOV (sp)

SUB SP,SP,#-4

pop {R3,R4,R5} //Get the values back

Bad pointers:

C++:

#include <iostream>

using namespace std;

int main(){

Int a=2;

Int \*p; // This will crash the laptop will print Segmentation fault (core dumped):

p =&a

cout << \*p;

Indirect chain:

C++:

Int a =2; // (BP, 8)

Int \*p =&a; // (BP, 12)

int \*\*q= &p; // (BP,16)

cout << \*\*q;

Assembly:

Mov (BF, #12), BP, #8

Mov (BF, #16), BP, #12 (Base pointer)