ForNextDay 5

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codefrag.c

#include<stdio.h>

#include<stdlib.h>

int main(void)

{

int i = 2;

int\* pi;

pi = &i;

printf("%p: %i\n", &i, i);

printf("%p: %i\n", pi, \*pi);

\*pi = 4;

printf("%p: %i\n", &i, i);

printf("%p: %i\n", pi, \*pi);

return EXIT\_SUCCESS;

}

A picture containing food

Description automatically generated

Since the pointer pi is set to the same address as int i then they contain the same value. When pi is changed i is changed and vice versa.

zero.c

/\* the value a the address in pi is

\* set to zero.

\*/

void zero(int\* pi){

\*pi = 0;

}

int main(void){

int\* pointer;

zero(pointer);

return EXIT\_SUCCESS;

}

Stack

zero()

pi 0xFFFF

main()

pointer 0xFFFF

swap.c

#include<stdio.h>

#include<stdlib.h>

int main(int argc, char\* argv[])

{

int i = 10;

int\* pi = &i;

int j = 99;

int\* pj = &j;

printf("i = %d; j = %d\n", i, j);

swap(pi,pj);

printf("i = %d; j = %d\n", i, j);

return EXIT\_SUCCESS;

}

void swap(int\* i, int\* j)

{

int swap = \*i;

\*i = \*j;

\*j = swap;

}

print addresses

int main(int argc, char\* argv[])

{

int i = 10;

int\* pi = &i;

int j = 99;

int\* pj = &j;

printf("i = %p; j = %p\n", pi, pj);

swap(pi,pj);

printf("i = %p; j = %p\n", pi, pj);

return EXIT\_SUCCESS;

}

myutils.c/.h

