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Lab 9

Question 1:

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Question 2:

#include<stdio.h>

#include<stdlib.h>

int main(){

char charvar='\0';

printf("address of charvar = %p\n",(void\*)(&charvar));

printf("address of charvar -1 = %p\n",(void\*)(&charvar-1));

printf("address of charvar +1 = %p\n",(void\*)(&charvar+1));

int intvar=1;

printf("address of intvar = %p\n",(void\*)(&intvar));

printf("address of intvar -1 = %p\n",(void\*)(&intvar-1));

printf("address of intvar +1 = %p\n",(void\*)(&intvar+1));

return 0;

}

Text

Description automatically generated

Intvar is a variable and is going up by 4 bytes, so it takes 4 bytes of memory.

Question 3:

#include <stdio.h>

int main(){

int number[5] = {1,2,3,4,5};

int i = 0;

printf("numbers = %p\n", numbers);

do{

printf("numbers[%u] = %p\n" i,(void \*) (&numbers[i]));

} while(i <5);

printf("sizeof(numbers) = %lu\n", sizeof(numbers));

printf("length(numbers) = %lu\n", sizeof(numbers)/sizeof(numbers[0]));

}

Text

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The address for both are the same for the first array and the first address as well.

printf("length(numbers) = %lu\n", sizeof(numbers)/sizeof(numbers[0]));