ForNextDay(Lecture2)

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CS2263

**print65.c**

#include<stdlib.h>

#include<stdio.h>

int main()

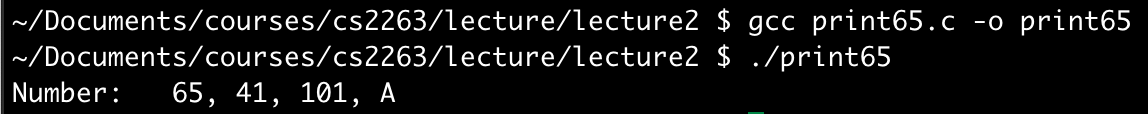
{

int val = 65;

printf("Number: %4d, %x, %o, %c \n", val, val, val, (char)val);

return EXIT\_SUCCESS;

}



**checkSizes.c**

#include<stdlib.h>

#include<stdio.h>

int main()

{

char exChar;

int exInt;

float exFloat;

double exDouble;

printf("Size of char: %d \n", sizeof(exChar));

printf("Size of int: %d \n", sizeof(exInt));

printf("Size of float: %d \n", sizeof(exFloat));

printf("Size of double: %d \n", sizeof(exDouble));

return EXIT\_SUCCESS;

}

A picture containing drawing

Description automatically generated

These numbers represent the number of bytes needed to store the data type. A char is stored in 8 bits or 1 byte. Both integers and floats are stored in 32 bits or 4 bytes and a double is stored 64 bits or 8 bytes.

Signed Integer max: 2147483647, min: -2147483647-1

**playStack.c**

#include <stdio.h>

#include <stdlib.h>

#define MAX 256

#define PUSH 1

#define POP 0

#define LIST 2

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

{

int stack[MAX];

int size = 0;

int val;

int iChoice;

int iNRead;

/\* Processing loop \*/

printf("Choice (1=add, 0=remove, 2=list): ");

iNRead = scanf("%d", &iChoice);

while(iNRead == 1)

{

switch(iChoice)

{

case PUSH:

printf("Value to add: ");

scanf("%d", &val);

if(size < MAX) {

stack[size] = val;

size++;

}

// Read the element, add it to the stack

break;

case POP:

if(size > 0){

size--;

val = stack[size];

printf("Value popped: %d \n", val);

}

// Print out the last element and remove it.

break;

case LIST:

for(int i=0; i<size; i++)

{

printf("Value at %d = %d \n", i, stack[i]);

}

// Print out the stack elements

break;

}

printf("Choice (1=add, 0=remove, 2=list): ");

iNRead = scanf("%d", &iChoice);

}

return EXIT\_SUCCESS;

}

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