#include <stdio.h>

#include <stdlib.h>

struct arithmetic {

int digit;

struct arithmetic \*next;

};

int main() {

char str1[1000];

char str2[1000];

printf("Specify the first number\n");

scanf("%s", str1);

printf("Specify the second number\n");

scanf("%s", str2);

printf("You entered %s and %s\n", str1, str2);

struct arithmetic \*number1 = NULL;

struct arithmetic \*number2 = NULL;

struct arithmetic \*number3 = NULL;

struct arithmetic \*point1 = NULL;

struct arithmetic \*point2 = NULL;

struct arithmetic \*point3 = NULL;

int i = 0;

while (str1[i] != '\0') {

int convert = str1[i] - '0';

struct arithmetic \*newdigit = (struct arithmetic\*)malloc(sizeof(struct arithmetic));

newdigit->digit = convert;

newdigit->next = point1;

point1 = newdigit;

i++;

}

i = 0;

while (str2[i] != '\0') {

int convert = str2[i] - '0';

struct arithmetic \*newdigit = (struct arithmetic\*)malloc(sizeof(struct arithmetic));

newdigit->digit = convert;

newdigit->next = point2;

point2 = newdigit;

i++;

}

int carry = 0;

while (point1 != NULL || point2 != NULL || carry) {

int sum = carry;

if (point1 != NULL) {

sum += point1->digit;

point1 = point1->next;

}

if (point2 != NULL) {

sum += point2->digit;

point2 = point2->next;

}

carry = sum / 10;

sum = sum % 10;

struct arithmetic \*newdigit = (struct arithmetic\*)malloc(sizeof(struct arithmetic));

newdigit->digit = sum;

newdigit->next = point3;

point3 = newdigit;

}

printf("Resultant\n");

while (point3 != NULL) {

printf("%d", point3->digit);

point3 = point3->next;

}

return 0;

}

