Assignment 4

Multiprecision Arithmetic

BT23CSE107

ASHISH

#include <stdio.h>

#include <string.h>

void reverseStr(char\* str) {

int n = strlen(str);

for (int i=0;i<n/2;i++) {

char temp = str[i];

str[i] = str[n-i-1];

str[n-i-1] = temp;

}

}

int main() {

printf("------Multi-Precision Addition------\n");

char n1[1000], n2[1000], ans[1001];

int len1,len2,carry=0,i=0;

printf("Enter First Number:\n");

scanf("%s",n1);

printf("Enter Second Number:\n");

scanf("%s",n2);

reverseStr(n1);

reverseStr(n2);

len1 = strlen(n1);

len2 = strlen(n2);

while (i < len1 || i < len2 || carry) {

int digit1 = (i < len1) ? n1[i] - '0' : 0;

int digit2 = (i < len2) ? n2[i] - '0' : 0;

int sum = digit1 + digit2 + carry;

carry = sum / 10;

ans[i] = (sum % 10) + '0';

i++;

}

ans[i] = '\0';

reverseStr(ans);

printf("Addition : %s\n", ans);

return 0;

}

