LetsUpgrade

Assignment day\_8

Question 1

A Barua number is a number which consists of only zeroes and ones and has only one 1.

Barua number will start with 1. Given numbers, find out the multiplication of the numbers.

Note: The input may contain one decimal number and all other Barua numbers. (Assume

that each number is very large and total number of values give is also very large)

Input 1: 100 10 12 1000

Output 1: 12000000

Input 2: 100 121 1000000000000000

Output 2: 12100000000000000000

Input 3: 10 100 1000

Output 3: 1000000

Ans:-

#include<stdio.h>

#include<conio.h>

int main(){

int a , b , c ,d;

a=b=c=d=1;

int temp1 , temp2 , temp3 , temp4;

int count = 1;

int mul;

int ans;

scanf("%d%d%d%d",&a ,&b ,&c ,&d);

//for a

while(a%10==0 || b%10==0 || c%10==0 || d%10==0){

temp1 = a/10;

temp2 = b/10;

temp3 = c/10;

temp4 = d/10;

a = temp1;

b = temp2;

c = temp3;

d = temp4;

count++;

}

mul = a \* b \* c \* d;

for(int i=1; i <= count ; i++){

ans = mul \*10;

}

printf("%d",ans);

return 0;

}

Question 2

Implement push, pop and find the minimum element in a stack in O(1) time complexity.

Ans:-

void push(){

int data;

if(top >= n){

printf(“Overflow”);}

else{

printf(“enter the element”);

scanf(“%d”,&data);

top=top+1;

stack[top]=data;}

}

void pop(){

int data;

if(top<=0){

printf(“Underflow”);}

else{

data = stack[top];

top = top-1;

printf(“poped item : %d”,data);}

}

void min(){

int data;

data = stack[0];

if(top<=0){

printf(“Underflow”);}

else{

for(int i=1 ; i<n ; i++){

if(dat>stack[i]){

min = data;}

}

Printf(“%d minimum element”,min);

}

}