“C PROGRAM FOR INSERTION AND DELETION OF BST”

#include <stdio.h>

#include <stdlib.h>

void push1(int);

void push2(int);

int pop1();

int pop2();

void enqueue();

void dequeue();

void display();

void create();

int stack1[100], stack2[100];

int top1 = -1, top2 = -1;

int count = 0;

int main()

{

int choice;

printf("Queue using stack implementation.");

printf("\n1.ENQUEUE");

printf("\n2.DEQUEUE");

printf("\n3.DISPLAY");

printf("\n4.EXIT");

create();

while (1)

{

printf("Enter any choice : ");

scanf("%d", &choice);

switch (choice)

{

case 1:

enqueue();

break;

case 2:

dequeue();

break;

case 3:

display();

break;

case 4:

exit(0);

default:

printf("The choice is invalid.");

}}}

void create()

{

top1 = top2 = -1;

}

void push1(int element)

{

stack1[++top1] = element;

}

int pop1()

{

return(stack1[top1--]);

}

void push2(int element)

{

stack2[++top2] = element;

}

int pop2()

{

return(stack2[top2--]);

}

void enqueue()

{

int data, i;

printf("Enter Data : ");

scanf("%d", &data);

push1(data);

count++;

}

void dequeue()

{

int i;

for (i = 0;i <= count;i++)

{

push2(pop1());

pop2();

count--;

}

for (i = 0;i <= count;i++)

{

push1(pop2());

}

}

void display()

{

int i;

if(top1 == -1)

{

printf("Empty Queue:");

}

else

{

printf("Queue Elements:");

for (i = 0;i <= top1;i++)

{

printf(" %d ", stack1[i]);

}

printf("\n");

}

}