// Insert /creation of BST using iterative method

#include<stdio.h>

#include<stdlib.h>

void insert(int);

struct node

{

int data;

struct node \*left;

struct node \*right;

};

struct node \*root;

int main ()

{

int choice,item;

do

{

printf("\nEnter the item which you want to insert?\n");

scanf("%d",&item);

insert(item);

printf("\nPress 0 to insert more ?\n");

scanf("%d",&choice);

}while(choice == 0);

}

void insert(int item)

{

struct node \*ptr, \*parentptr , \*nodeptr;

ptr = (struct node \*) malloc(sizeof (struct node));

if(ptr == NULL)

{

printf("can't insert");

}

else

{

ptr -> data = item;

ptr -> left = NULL;

ptr -> right = NULL;

if(root == NULL)

{

root = ptr;

root -> left = NULL;

root -> right = NULL;

}

else

{

parentptr = NULL;

nodeptr = root;

while(nodeptr != NULL)

{

parentptr = nodeptr;

if(item < nodeptr->data)

{

nodeptr = nodeptr -> left;

//ptr = nodeptr -> left;

}

else

{

nodeptr = nodeptr -> right;

}

}

if(item < parentptr -> data)

{

parentptr -> left = ptr;

}

else

{

parentptr -> right = ptr;

}

}

printf("Node Inserted");

}

}