***Binary Search Tree:***

#include<stdio.h>

int main()

{

int arr[100],arrB[100],n,root=1,item,index,i;

for(int i=1; i<=100; i++)

{

arrB[i]=NULL;

}

printf("Enter the Element number:\n");

scanf("%d",&n);

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

{

scanf("%d",&arr[i]);

}

arrB[root]=arr[1];

for(int i=2; i<=n; i++)

{

root=1;

while(arrB[root]!=NULL)

{

if(arr[i]>arrB[root])

{

root=2\*root+1;

}

else if(arr[i]<arrB[root])

{

root=2\*root;

}

}

if(arrB[root]==NULL)

{

arrB[root]=arr[i];

}

index=root;

}

printf("\nEnter the search item : ");

scanf("%d",&item);

i=1;

while(i<=index)

{

if(item>arrB[i])

{

i=2\*i+1;

}

else if(item<arrB[i])

{

i=2\*i;

}

if(item==arrB[i])

{

printf("Found at :%d",i);

break;

}

}

if(i>index+1)

{

printf("NOT FOUND");

}

return 0;

}