

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

typedef struct tree *pohon;

struct tree{
    char info;
    pohon kiri;
    pohon kanan;
};

pohon baru(char hrf)
{
    pohon br;
    br=(pohon)malloc(sizeof(struct tree));
    br->info=hrf;
    br->kiri=NULL;
    br->kanan=NULL;
    return (br);
}

void sisip (pohon ph, pohon sp)
{
    pohon P,Q;
    P = ph;
    Q = ph;
```

```

while((sp->info != ph->info) && (Q!=NULL))
{
    P = Q;
    if (sp->info < P->info)
        Q = P->kiri;
    else
        Q = P->kanan;
}
if(sp->info == P->info)
    printf("Sudah ada");
else
    if(sp->info < P->info)
        P->kiri=sp;
    else
        P->kanan=sp;
}

```

```

void preorder(pohon ph)
{
    if (ph != NULL)
    {
        printf("%c ", ph->info);
        preorder(ph->kiri);
        preorder(ph->kanan);
    }
}

```

```
void inorder(pohon ph)
{
    if (ph != NULL)
    {
        inorder(ph->kiri);
        printf("%c ", ph->info);
        inorder(ph->kanan);
    }
}
```

```
void postorder(pohon ph)
{
    if (ph != NULL)
    {
        postorder(ph->kiri);
        postorder(ph->kanan);
        printf("%c ", ph->info);
    }
}
```

```
main()
{
    int j=0;char input,jawab[2];
    pohon br, ssp;
    while(1)
    {
        printf("Ketikkan huruf :");scanf("%c",&input);
```

```
fflush(stdin);
if (j==0) br = baru(input);
else
{
    ssp = baru(input);
    sisip(br,ssp);
}
printf("Ada data lagi(y/t):"); scanf("%s",&jawab);
fflush(stdin);

if((strcmp(jawab,"Y")==0)|| (strcmp(jawab,"y")==0))
{
    j++;continue;
}
else if ((strcmp(jawab,"T")==0)|| (strcmp(jawab,"t")==0))
    break;
}
preorder(br); printf("\n");
inorder(br); printf("\n");
postorder(br);
}
```