

```

#include <stdio.h>

#include <stdlib.h> // for exit()

#define SIZE 100

int a[SIZE], c, p, n = 0;

void bst(int ele) {
    if (a[0] == 0) { // changed NULL to 0
        a[0] = ele;
        return;
    }
    c = 0;
    p = -1;
    while (a[c] != 0) { // changed NULL to 0
        p = c;
        if (ele < a[c])
            c = 2 * c + 1;
        else
            c = 2 * c + 2;
    }
    a[c] = ele;
}

void display() {
    int i;
    for (i = 0; i < SIZE; i++) {
        if (a[i] == 0) // changed NULL to 0
            continue;
        printf("a[%d] = %d\n", i, a[i]);
    }
}

```

```
}  
}
```

```
int main() { // changed void to int  
    int ch, i, j, ele;  
    for (i = 0; i < SIZE; i++)  
        a[i] = 0; // changed NULL to 0  
    printf("1. bst\n2. display\n3. exit\n"); // added third option  
    for (;;) {  
        printf("\nEnter choice\n");  
        scanf("%d", &ch);  
        switch (ch) {  
            case 1:  
                printf("\nEnter no of ele to enter\n");  
                scanf("%d", &j);  
                printf("\nEnter the array of elements\n");  
                for (i = 0; i < j; i++) {  
                    scanf("%d", &ele);  
                    bst(ele);  
                }  
                break;  
            case 2:  
                display();  
                break;  
            case 3:  
                exit(0);  
            default: // added default case  
                printf("\nInvalid choice\n");  
                break;  
        }  
    }  
}
```

```
    }  
}  
return 0; // added return statement  
}
```

Output:

1. bst
2. display
3. exit

Enter choice

1

Enter no of ele to enter

8

Enter the array of elements

50

20

3

15

30

45

60

10

Enter choice

2

A[0] = 50

A[1] = 20

$A[2] = 60$

$A[3] = 3$

$A[4] = 30$

$A[8] = 15$

$A[10] = 45$

$A[17] = 10$

Enter choice

3