The public test of Task 4 is:

```
DenseTuringMachine t(10,10);
TuringMachineState s1(1,2,3,4,"->");
t.add(s1);
TuringMachineState s2(5,6,7,8,"<-");

t.add(s2);
cout << *t.find(1,2);
cout << *t.find(5,6)<<endl;
cout << (t.find(1,3)==NULL)<<endl;
vector<TuringMachineState> vec=*t.getAll();
sort(vec.begin(),vec.end(),compareState);
for (auto s: *t.getAll()) cout << s;
```

where

```
bool compareState(TuringMachineState s1, TuringMachineState
s2) {
     return
(s1.getCurrentState()<s2.getCurrentState())||(s1.getCurrentSta
te()==s2.getCurrentState())&&s1.getCurrentContent()<s2.getCurr
entContent();
}
```

The program does not need input.

The expected output is:

```
1 2 3 4 ->5 6 7 8 <-
1
1 2 3 4 ->5 6 7 8 <-
```