Labb 3

Körnings tider för 3.2

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 11

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 11

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10
```

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 12

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 11

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 9
```

10000:

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 36

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 36

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 39

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 43

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 38

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 44

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 38
```

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 42

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 40

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java two < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 36

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>
```

Körnings tider för 3.3

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 9

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 9

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 11

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 1000

Excekveringstiden: 10
```

```
C:\WINDOWS\system32\cmd.exe

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words   = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words   = 1000

Excekveringstiden: 11

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words   = 1000

Excekveringstiden: 10

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words   = 1000

Excekveringstiden: 10
```

10000

```
C:\Users\noete\IdeaProjects\3LabbAlgDat\src>javac three.java

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 26

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 27

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 26

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 23

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 25

C:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.txt
Symbol Table:

words  = 10000

Excekveringstiden: 23
```
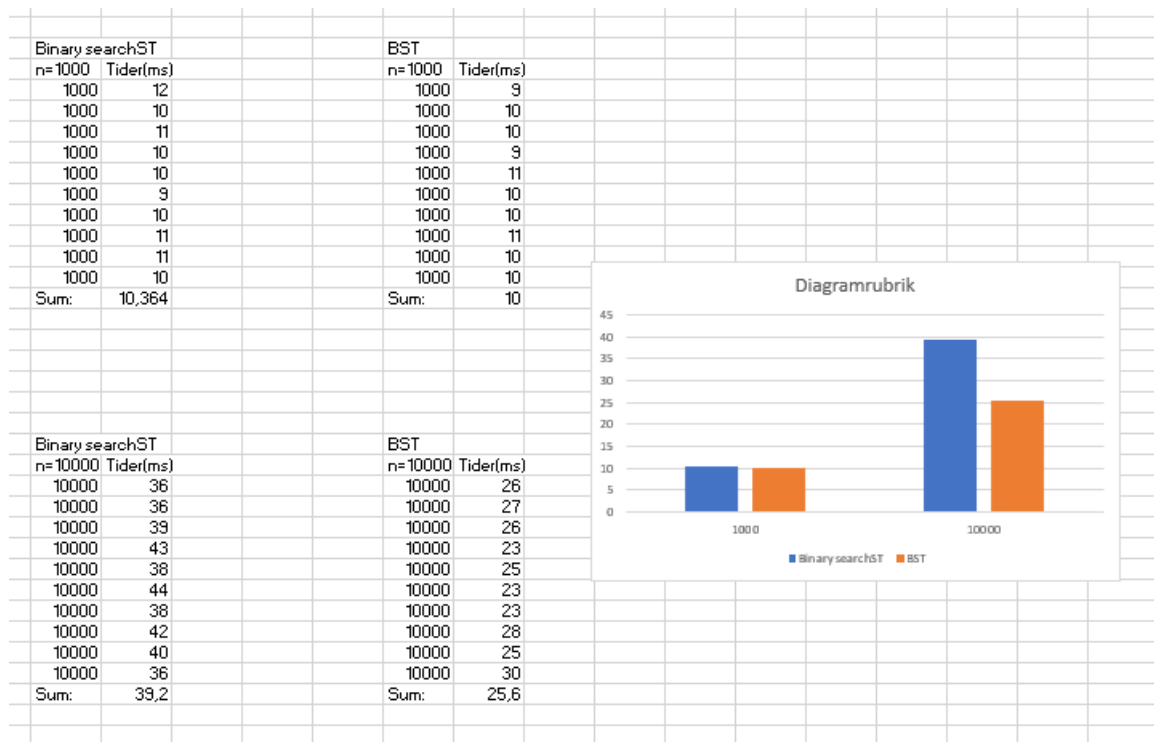
```
:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.
ymbol Table:

vords  = 10000

xcekveringstiden: 23

:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.
ymbol Table:

vords  = 10000

xcekveringstiden: 23

:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.
ymbol Table:

vords  = 10000

xcekveringstiden: 28

:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.
ymbol Table:

vords  = 10000

xcekveringstiden: 25

:\Users\noete\IdeaProjects\3LabbAlgDat\src>java three < filtrerad2.
ymbol Table:

vords  = 10000

xcekveringstiden: 30
```

Binary searchST			BST	
n=1000	Tider(ms)		n=1000	Tider(ms)
1000	12		1000	9
1000	10		1000	10
1000	11		1000	10
1000	10		1000	9
1000	10		1000	11
1000	9		1000	10
1000	10		1000	10
1000	11		1000	11
1000	11		1000	10
1000	10		1000	10
Sum:	10,364		Sum:	10

Diagramrubrik

Binary searchST			BST	
n=10000	Tider(ms)		n=10000	Tider(ms)
10000	36		10000	26
10000	36		10000	27
10000	39		10000	26
10000	43		10000	23
10000	38		10000	25
10000	44		10000	23
10000	38		10000	23
10000	42		10000	28
10000	40		10000	25
10000	36		10000	30
Sum:	39,2		Sum:	25,6

Knappt någon skillnad mellan söknings metoderna vid 1000 element men vid 10000 så är BST snabbare. I avarege case så kör ju BST i lg(n) medans binary search ST körs i n.