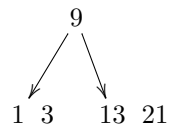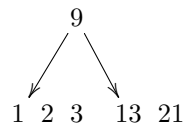Insert of 3, 21, 9, 1, 13

3 21 9 1 13
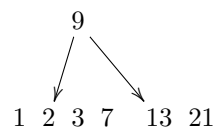
Since 13 is a 5th element, we can promote the 9 and reorder

9
1 3   13 21

Insert of 2

9
1 2 3   13 21

Insert of 7

9
1 2 3 7   13 21

Insert of 10

9
1 2 3 7   10 13 21

Insert of 12

9
1 2 3 7   10 12 13 21

Insert of 4

9
1 2 3 4 7   10 12 13 21
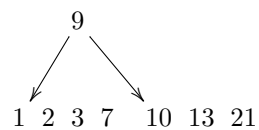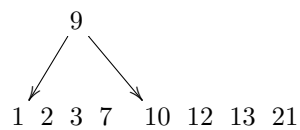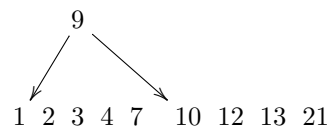
Since there is a 5th element, we promote 3
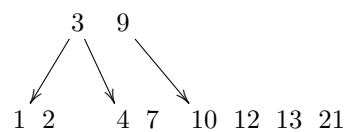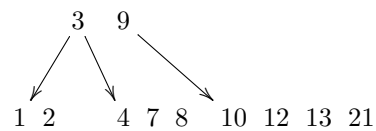
3   9
1 2   4 7   10 12 13 21

Insert 8

3   9
1 2   4 7 8   10 12 13 21

Delete 2

3   9
1 4 7 8   10 12 13 21

Delete 21

3   9
1 4 7 8   10 12 13

1

Delete 10

```
        3    9
       /      \
      ↓        ↓
   1  4  7  8   12  13
```

Delete 3

```
        7    9
       /      \
      ↓        ↓
    1  4  8    12  13
```

Delete 4

```
        7    9
       /      \
      ↓        ↓
     1  8      12  13
```

Delete 8

```
          9
         / \
        ↓   ↓
      1  7   12  13
```

Insert 44

```
          9
         / \
        ↓   ↓
      1  7   12  13  44
```

Insert 45

```
          9
         / \
        ↓    ↓
      1  7    12  13  44  45
```
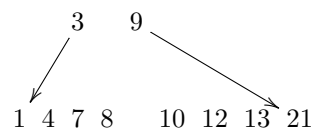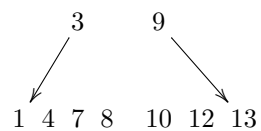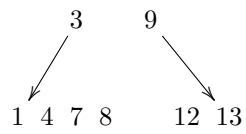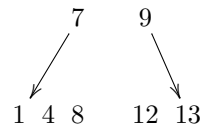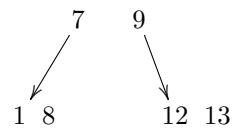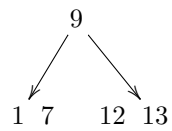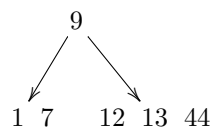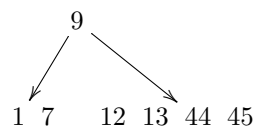
Insert 47

```
          9
         / \
        ↓    ↓
      1  7    12  13  44  45  47
```
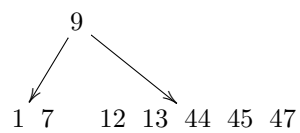
Since 47 is 5th element, we promote 44

```
          9       44
         / \      / \
        ↓    ↓   ↓    ↓
      1  7   12  13   45  47
```

Insert 48

```
          9       44
         / \      / \
        ↓    ↓   ↓    ↓
      1  7   12  13   45  47  48
```

Insert 49

```
          9       44
         / \      / \
        ↓    ↓   ↓    ↓
      1  7   12  13   45  47  48  49
```