Arrayer

Konstant

```
      int   length
```

Klassen Object

Metoder

```
  boolean   equals(Object o)
      int   hashCode()
   String   toString()
```

Klassen String

Metoder

```
     char   charAt(int index)
  boolean   equals(Object o)
      int   compareTo(String str)
      int   length()
```

Klassen ArrayList

Konstruktor:

```
ArrayList<E>()
```

Exempel på användning:

```
ArrayList<Integer> ex = new ArrayList<Integer>();
```

Metoder

```
      int   size()
  boolean   equals(Object o)
  boolean   add(E e)
  boolean   add(int index, E element)
        E   get(int index)
        E   remove(int index)
  boolean   remove(Object o)
        E   set(int index, E element)
     void   clear()
```

Klassen Scanner

Konstruktorer

```
Scanner(String s)
Scanner(System.in) // scan from standard input
```

Metoder

```
  boolean   hasNext()
  boolean   hasNexInt()
  boolean   hasNextDouble()
  boolean   hasNextLine()
   String   next()
      int   nextInt()
   double   nextDouble()
   String   nextLine()
     void   close()
```

Klassen Double

Konstruktorer

```
Double(String s)
Double(double d)
```

Metoder

```
         double   doubleValue()
  static double   parseDouble(String s)
```

Klassen Integer

Konstruktorer

```
Integer(String s)
Integer(int d)
```

Metoder

```
          int   intValue()
   static int   parseInt(String s)
```

Klassen Math

Konstanter och metoder

```
static double   PI
static double   E
static double   exp(double d)
static double   log(double d)
static double   sin(double d)
static double   cos(double d)
static double   random()
   static int   abs(int i)
static double   abs(double d)
   static int   max(int i, int j)
static double   max(double x, double y)
   static int   min(int i, int j)
static double   min(double x, double y)
static double   pow(double x, double y)
```

Läsa en fil

Exempel:

```
String filename = "input.txt";
BufferedReader reader =
    new BufferedReader(new FileReader(filename));
Scanner scanner = new Scanner(reader);
...
scanner.close();
```

OBS: `new FileReader(filename))` kan förorsaka `FileNotFoundException`.

Skriva en fil

Exempel:

```
String filename = "output.txt";
File file = new File(filename);
if (file.exists()) {
   System.out.println("The file ’" + filename + "’ exists!");
   return;
}
System.out.println("Creating ’" + filename + "’");
PrintWriter output = new PrintWriter(file);
output.println("First line");
output.print("Second ");
output.println("and last line");
output.close();
```

Klassen `LinkedList`

Konstruktor

```
LinkedList<E>()
```

Exempel på användning:

```
LinkedList<String> name =
                   new LinkedList<String>();
```

Metoder

```
boolean   equals(Object o)
boolean   add(E e)
   void   add(int index, E element)
   void   addFirst(E e)
   void   addLast(E e)
   void   clear()
boolean   contains(E element)
      E   get(int index)
      E   getFirst()
      E   getLast()
    int   indexOf(Object o)
      E   remove(int index)
boolean   remove(Object o)
      E   removeFirst()
      E   removeLast()
      E   set(int index, E element)
    int   size()
```

Klassen `TreeSet`

Konstruktor

```
TreeSet<E>()
```

Exempel på användning:

```
TreeSet<String> name = new TreeSet<String>();
```

Metoder

```
    int   size()
boolean   add(E e)
boolean   contains(Object o)
boolean   remove(Object o)
   void   clear()
```

Klassen `TreeMap`

Konstruktor

```
TreeMap<K,V>()
```

Exempel på användning:

```
  TreeMap<String, Double> name =
      new TreeMap<String,Double>();
```

Metoder

```
    int   size()
      V   put(K k, V v)
boolean   containsKey(Object key)
boolean   containsValue(Object value)
      V   get(Object key)
      V   remove(Object key)
   void   clear()
```

Klassen `RuntimeException`

Konstruktorer

```
RuntimeException(String msg)
```

Metoder

```
String   getMessage()
```