

# Chapter 1

## Loops

### 1.1 List based loops

The sun is rising.The sun is shining.The sun is setting.

### 1.2 Range based loops

135

### 1.3 Loops using repeat

1 3 5 7 9



## Chapter 2

# Arrays

Basics taken from topskip on SO (<https://stackoverflow.com/questions/2647674/does-latex-have-an-array-data-structure>). Array implementation expands on this in a more generic way.

### 2.1 Declaration

### 2.2 Access hardcoded

myfirstelement

## 2.3 Access using variable

mysecondelement

## 2.4 Stack

### 2.4.1 Looping over it

- first item
- second item
- third item

### 2.4.2 Pushing and popping

third item  
second item  
fifth item  
fourth item

### 2.4.3 Looping over it (again)

- first item

## Chapter 3

# Map

### 3.1 Simple test

Content of newmap

- first test string
- second test string

### 3.2 Collision

Content of collisionmap

- three
- one

- two
- new
- four

**Content of collisionmap**

- three
- one
- new
- four

new value

# Chapter 4

## Context

**Content of Formulas**

**Content of Alice**

### 4.1 Formula

This section introduces the pythagorean theorem.



**Content of Formulas**

- pythagorean theorem

## 4.2 Hutmacher

Alice received a beautiful hat from the Hutmacher. ■

### **Content of Alice**

- beautiful hat

## 4.3 Big Bad Bear

Unfortunately the big bad bear stole Alice's beautiful hat. ■

### **Content of Alice**

- does not like the bear ■

## 4.4 What happened so far

### **Content of Alice**

- does not like the bear ■

### **Content of Formulas**

- pythagorean theorem