```
1.
```

 $\begin{array}{l} age <- \ c(34,\ 28,\ 22,\ 36,\ 27,\ 18,\ 52,\ 39,\ 42,\ 29,\ 35,\ 31,\ 27,\ 22,\ 37,\ 34,\ 19,\ 20,\ 57,\ 49,\ 50,\ 37,\ 46,\ 25,\ 17,\ 37,\ 42,\ 53,\ 41,\ 51,\ 35,\ 24,\ 33,\ 41) \end{array}$ 

length\_age <- length(age) print(length\_age)</pre>

# 2.

reciprocal\_age <- 1 / age print(reciprocal\_age)</pre>

# 3.

new\_age <- c(age, 0, age) print(new\_age)

### 4.

sorted\_age <- sort(age) print(sorted\_age)

### **5.**

min\_age <- min(age) max\_age <- max(age) print(min\_age) print(max\_age)

### 6.

data <- c(2.4, 2.8, 2.1, 2.5, 2.4, 2.2, 2.5, 2.3, 2.5, 2.3, 2.4, 2.7) length\_data <- length(data) print(length\_data)

### 7.

 ${\tt double\_data} < - \; {\tt data} \; * \; 2 \; {\tt print}({\tt double\_data})$ 

### 8.1

 $seq_1_{to} - seq(1, 100)$  print  $(seq_1_{to} - 100)$ 

### 8.2

 $seq_20_{to}60 < seq(20, 60) print (seq_20_{to}60)$ 

## 8.3

mean 20 to 60 < -mean(20.60) print (mean 20 to 60)

### 8.4

sum\_51\_to\_91 <- sum(51:91) print (sum\_51\_to\_91)

### 8.5

```
seq_1 < -seq(1, 1000) print (seq_1)
```

### 8.b

 $\label{length} $$ $ \det_points <- \operatorname{length}(seq\_1\_to\_100) + \operatorname{length}(seq\_20\_to\_60) + \operatorname{length}(mean\_20\_to\_60) + \operatorname{length}(sum\_51\_to\_91) \ print(data\_points) $$$ 

### 8.c

```
max until 10 < -\max(\text{seq } 1 \text{ to } 1000[1:10]) \text{ print}(\text{max until } 10)
```

#### 9.

 $filtered_numbers < - Filter(function(i) { all(i \%\% c(3, 5, 7) != 0) }, seq(100)) print(filtered_numbers)$ 

### 10.

seq backwards <- seq(100, 1) print(seq backwards)

### 11.

multiples\_3\_or\_5 <- seq(1, 24)[seq(1, 24) %% 3 == 0 | seq(1, 24) %% 5 == 0] sum\_multiples <- sum(multiples\_3\_or\_5) print(multiples\_3\_or\_5) print(sum\_multiples)

total data a sixter  $\epsilon$  length (see the dense de) + length (see this large  $\epsilon$  or  $\epsilon$ ) + length (see this large  $\epsilon$ )

 $total\_data\_points <- \ length(seq\_backwards) \ + \ length(multiples\_3\_or\_5) \ + \ length(sum\_multiples) \\ print(total\_data\_points)$ 

### 12.

$$x < \{0 + x + 5 + \}$$

### 13.

```
score <- c(72, 86, 92, 63, 88, 89, 91, 92, 75, 75, 77)
x2 <- score[2] x3 <- score[3] print(x2) print(x3)
```

### 14.

```
a \leftarrow c(1,2,999,4,999,6,7) \text{ print}(a, na.print = "-999")
```

#### 15.

name = readline(prompt="Inputyourname:") age = readline(prompt="Inputyourage:") print(paste("Mynameis",name, "andIam print(R.version.string)