

# check50

## cs50/labs/2023/x/population

### :) population.c exists

**Log**

```
checking that population.c exists...
```

### :) population.c compiles

**Log**

```
running clang population.c -o population -std=c11 -ggdb -lm -lcs50...
```

### :) handles starting values less than 9

**Log**

```
running ./population...  
sending input 8...  
sending input 8...  
checking that input was rejected...
```

### :) handles ending values less than starting values

**Log**

```
running ./population...  
sending input 50...  
sending input 49...  
checking that input was rejected...
```

## :) handles decimal number of llamas

### Log

```
running ./population...
sending input 1100...
sending input 1192...
checking for output "Years: 2"...
checking that program exited with status 0...
```

## :( handles same starting and ending sizes

### Cause

expected "Years: 0", not "End size: 100\..."

### Log

```
running ./population...
sending input 100...
sending input 100...
checking for output "Years: 0"...
```

### Expected Output:

Years: 0

### Actual Output:

End size: 100

Years: 1

## :) handles starting population of 1200

### Log

```
running ./population...
sending input 1200...
sending input 1300...
checking for output "Years: 1"...
checking that program exited with status 0...
```

## :) rejects invalid populations and then handles population 9

### Log

```
running ./population...
sending input -5...
sending input 3...
sending input 9...
sending input 5...
sending input 18...
checking for output "Years: 8"...
checking that program exited with status 0...
```

## :) rejects invalid populations and then handles population 20

### Log

```
running ./population...
sending input 20...
sending input 1...
sending input 10...
sending input 100...
checking for output "Years: 20"...
checking that program exited with status 0...
```

## :) handles starting population of 100

### Log

```
running ./population...
sending input 100...
sending input 1000000...
checking for output "Years: 115"...
checking that program exited with status 0...
```