

# Aim: Students will be able to iterate through data structures of different lengths in a loop structure.

```
1
2 seq = (ring, 50, 52, 54, 55, 57, 59, 61, 62).shuffle
3
4 use_random_seed Time.now.to_i
5 4.times do
6   new_seq = seq.take(dice)
7   puts new_seq
8   sleep 4
9 end
```

Students, write your response!



Write out what each line of code is doing.

Format your response like this:

Line 2: *explanation of what this line is doing*

Line 4: *explanation of what this line is doing*

```
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```



Students, write your response!

# Make a prediction about what this code is going to do

---

```
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5  4.times do
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7    puts new_seq
8    sleep 4
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```



Students, write your response!

Which line of code is causing is causing us to get a different amount of numbers each time?

— — —

```
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5  4.times do
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```



Students choose an option

# Copy and paste this code into Sonic Pi and run it.

— — —

```
seq = (ring, 50, 52, 54, 55, 57, 59, 61, 62)
```

```
use_random_seed Time.now.to_i
```

```
new_seq = seq.take(dice)
```

```
puts new_seq
```

```
4.times do
```

```
  play seq.tick
```

```
  sleep 1
```

```
end
```

**Write an observation about what you saw/heard  
happening in the code.**



Students, write your response!

# What is the problem we are having with our code?



Students, write your response!

# Hints

— — —

Everytime the console prints out the note sequence and sequence length, we are at the beginning of the .times do/end block which means we should be at the beginning of the sequence again.

Before we added the live loop, every time we ran the code, it started with the same number.



# Assignment:

— — —

Create a live loop which generates different lengths of note sequences that uses a ring method to change the length of the sequence.

## Checklist:

<https://docs.google.com/document/d/10YDj0f7TBPSt37Jd02xDpmEIxQg0SvNat9XRLXPEIfc/edit?usp=sharing>

Copy and Paste your code to this slide