Lecture 6: Control Flow Revisited

Carbon Dating

Write a program to calculate how old something is.

Input: what percent of c14 is remaining in the sample?

Output: age of the sample, in years

C14 = 100%

C14 = 8.8%

Half life constant

$$\text{age} = K \cdot \log\left(\frac{c14}{100}\right)$$

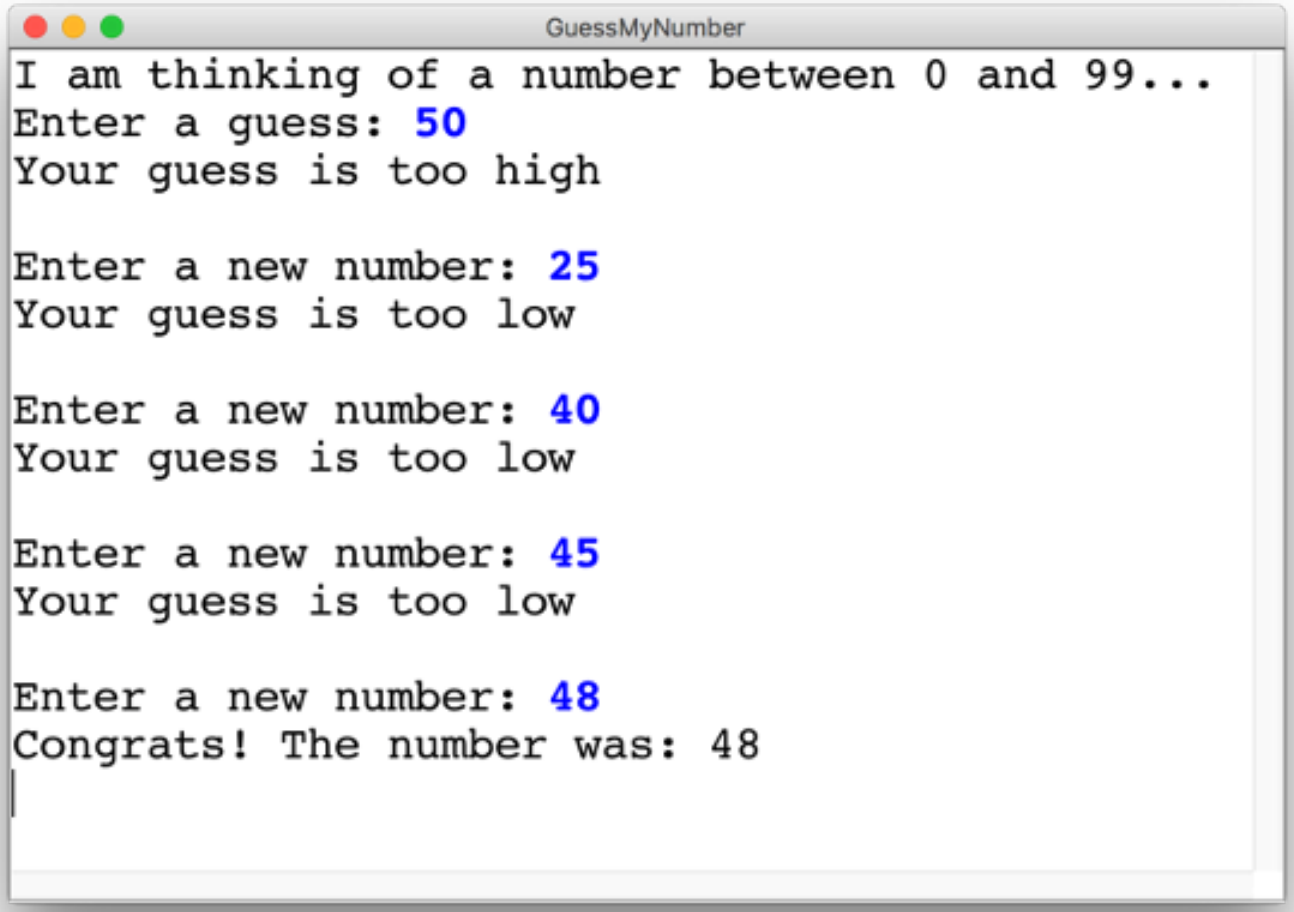
% of natural c14

Equals Contrast

This code slide does not have a description.

Guess My Number

Write a program that has a user try to guess the value of a number chosen between 1 and 99. Lets the user know if their guess is too low or too high



Sentinel Loops

Write a program that prompts the user for numbers until the user types -1, then output the total of the numbers. In this case, -1 is called a **sentinel value**

Here is an example run of the program:

```
Type a number: 10
Type a number: 20
Type a number: 30
Type a number: -1
total is 60
```

Print Even Numbers

Write a program to print the first 100 even numbers