

C: output; control structures

Announcements

- Before next class: read *DiS* sections and answer pre-class questions
- Lab 1: today & tomorrow

Outline

- Warm-up
- Output
- Control structures

Warm-up

Q1: Write a program that prints the number of days, hours, and minutes in a week.

```
#include <stdio.h>
int main() {

}
}
```

Output practice

Q2: Use *printf* to output today's date (e.g., *2021-1-29*)

Q3: Use *printf* to output the dimensions of a college basketball court (*94ft x 50ft*)

Q4: Use *printf* to output a patient's first and last initial and systolic and diastolic blood pressure (e.g., *A.G. 115/70*)

Control structures practice

Q5: Write a program that flips a coin: call `random()` to generate a random number, and print `heads` if the number is even and `tails` if the number is odd.

```
#include <           >
#include <           >
```

Q6: Write a program that prints all even numbers from 1 to 100 using a for loop.

```
#include <stdio.h>
```

Q7: Write a program that prints every letter of the alphabet in upper and lower case: `AaBbCcDd...YyZz`

Q8: Write a program that prints all numbers from 1 to 100, except:

- If the number is divisible by 3 then print *Three*
- If the number is divisible by 5 then print *Five*
- If the number is divisible by 3 and 5, print *Both*

Extra practice

Q9: Write a program that prints out the powers of 2 from 2 through 2048.

Q10: Write the same program as in Q6 using a while loop.

```
#include <stdio.h>
```

Worksheet created by Professor Aaron Gember-Jacobson