

Problem Set 1: C

What to Do

1. Implement [Hello](#)

```
pset1/ x +  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./hello  
Hello, world!
```

2. Implement [Water](#)

```
pset1/ x +  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./water  
Minutes: 1  
Bottles: 12  
~/workspace/pset1/ $ ./water  
Minutes: 10  
Bottles: 120  
~/workspace/pset1/ $ ./water  
Minutes: 20  
Bottles: 240  
~/workspace/pset1/ $ █
```

3. Implement either of:

- o [Mario](#), less comfortable

```
pset1/ x +  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./mario  
give me an integer < 23: 8  
##  
###  
####  
#####  
######  
#####  
####  
##  
~/workspace/pset1/ $ █
```

- o [Mario](#), more comfortable

```
pset1/ x +  
-----  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./marioM  
Height: 14  
## **  
### ***  
###** ****  
#### ***##  
##### *****  
#####* *****  
#####** *****  
#####*** *****  
#####***# *****  
#####***## *****  
#####***### *****  
#####***##** *****  
#####***##**# *****  
#####***##**## *****  
#####***##**### *****  
#####***##**##** *****  
#####***##**##**# *****  
#####***##**##**## *****  
#####***##**##**### *****  
#####***##**##**##** *****  
#####***##**##**##**# *****  
#####***##**##**##**## *****  
~/workspace/pset1/ $
```

4. Implement either of:

- o [Greedy](#), less comfortable

```
pset1/ x +  
-----  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./greedy  
0 hai! How much change is owed? -0.41  
0 hai! How much change is owed? 0.41  
4  
~/workspace/pset1/ $
```

- o [Credit](#), more comfortable

```
pset1/ x +  
-----  
~/workspace/ $ cd pset1  
~/workspace/pset1/ $ ./credit  
Please enter the card number: 378282246310005  
AMEX  
~/workspace/pset1/ $ ./credit  
Please enter the card number: 6176292929  
INVALID  
~/workspace/pset1/ $
```