Mid-semester test feedback

12 September 2016

Lecture overview

Today

- MST feedback (marks will be uploaded tonight)

Project 1

- We are currently marking

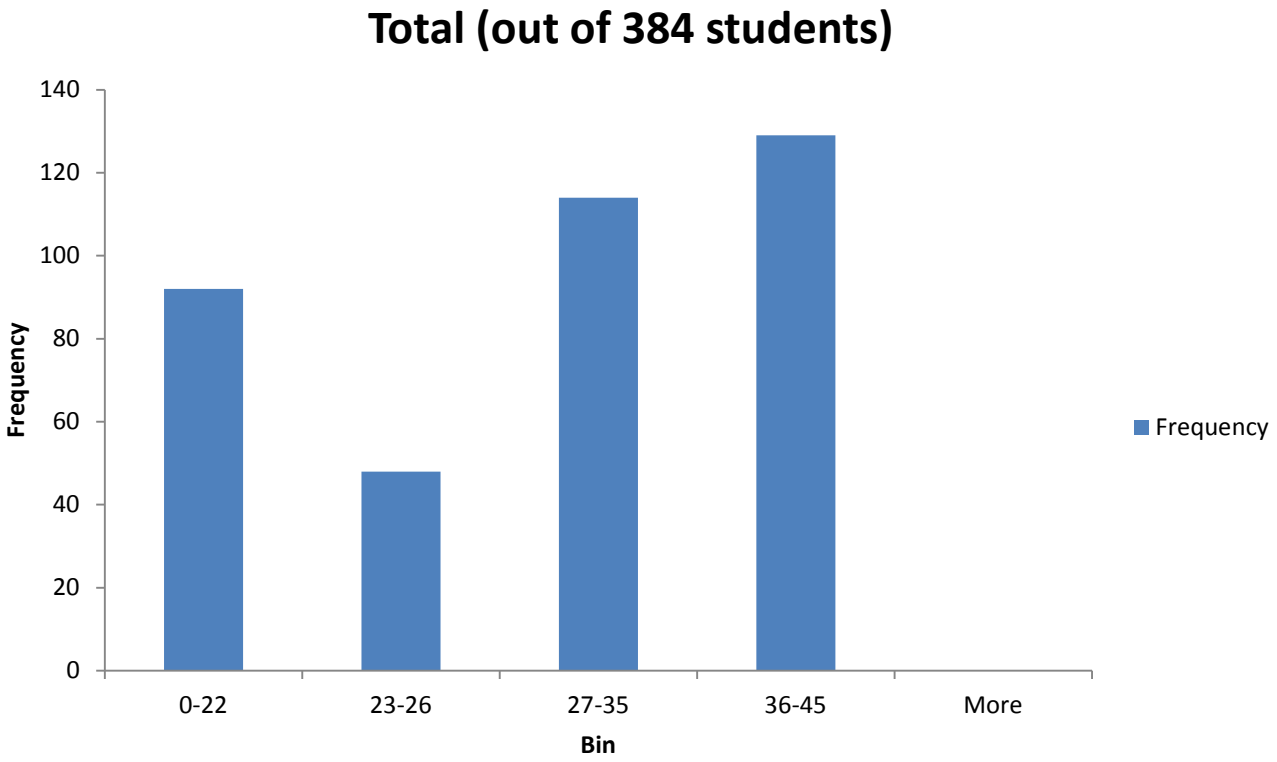
Test paper viewing

- 12noon-1pm Monday 19 September
  in room 7.02 Doug McDonell building

Mid-Semester Test

Overall Mark Distribution

- Most people did very well, even though we were quite hard on the marking



Question 1

(a) 'tra' + 'la' * 2

A: 'tralala'

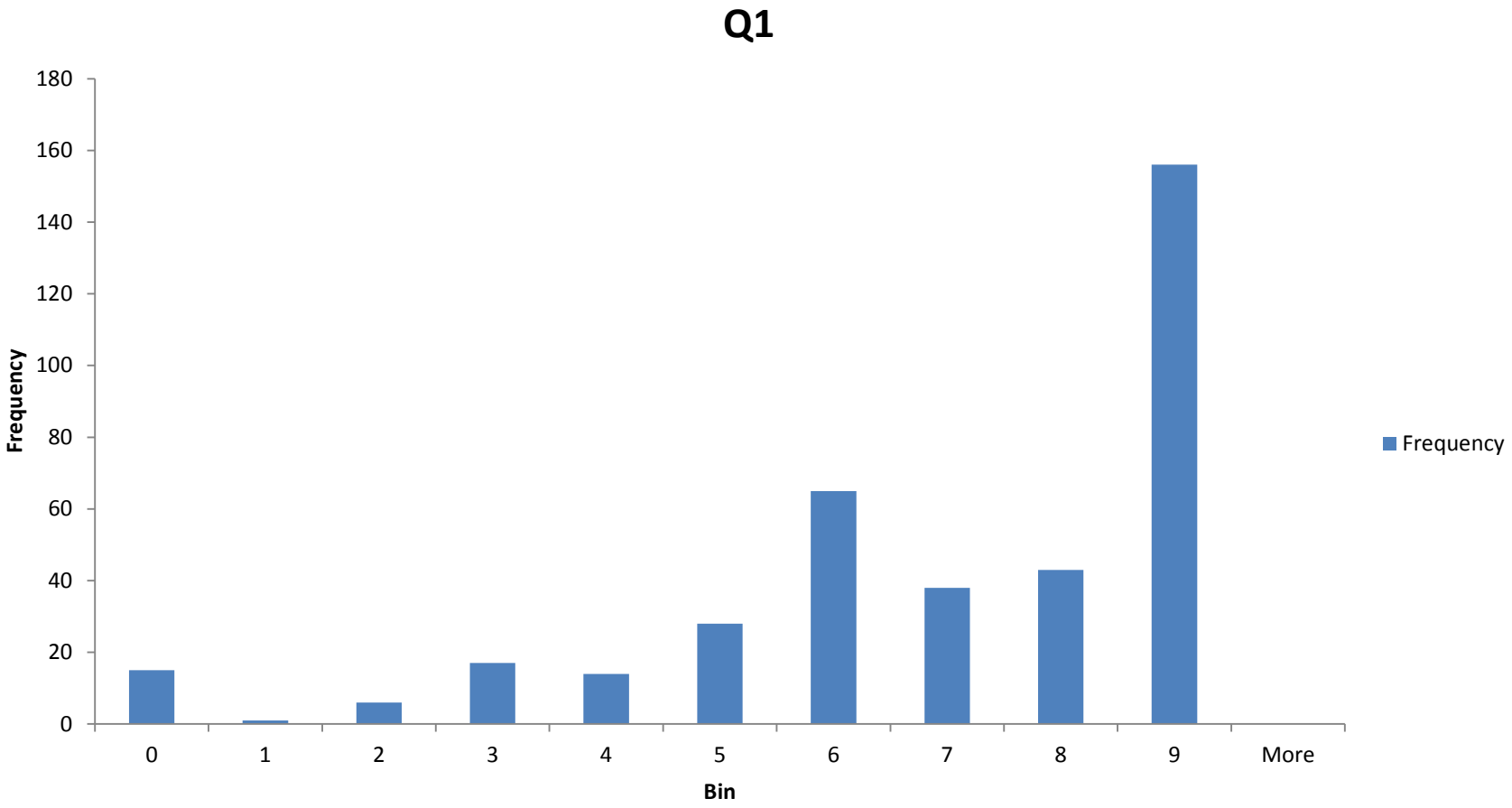
(b) 'python3'[1: :2]

A: 'yhn'

(c) **sorted**({7 : 6, 5 : 4, 3 : 2}.values())

A: [2, 4, 6]

Question 1


Q1
Frequency
180
160
140
120
100
80
60
40
20
0
0
1
2
3
4
5
6
7
8
9
More
Bin
Frequency

Question 2

```
numbers = [33, -17, 8, 99, -
102, 88]
a = []
b = []
c = []
for n in numbers:
    if n > 0:
        if n % 2 == 1:
            a.append(n)
        else:
            b.append(n)
    else:
        c = [n] + c
```

(a) a

A: [33, 99]

(b) b

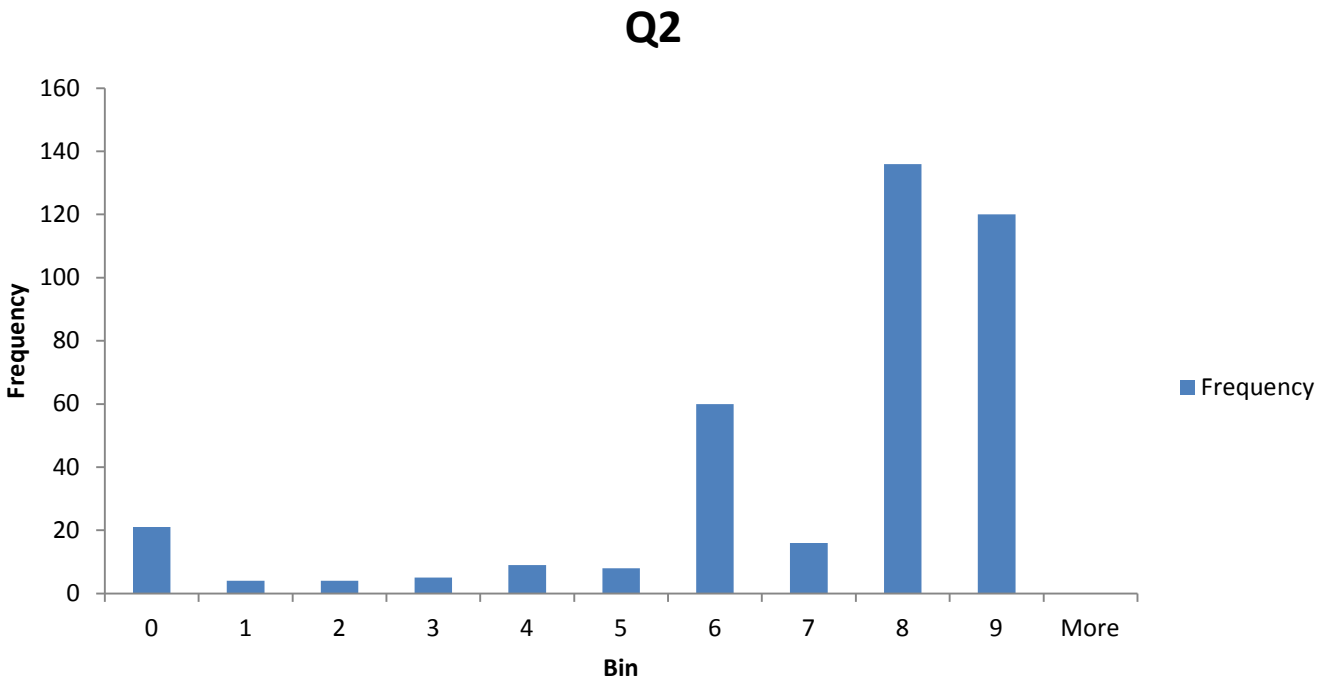
A: [8, 88]

(c) c

A: [-102, -17]

Question 2

- Most people have no problems tracing the execution of code



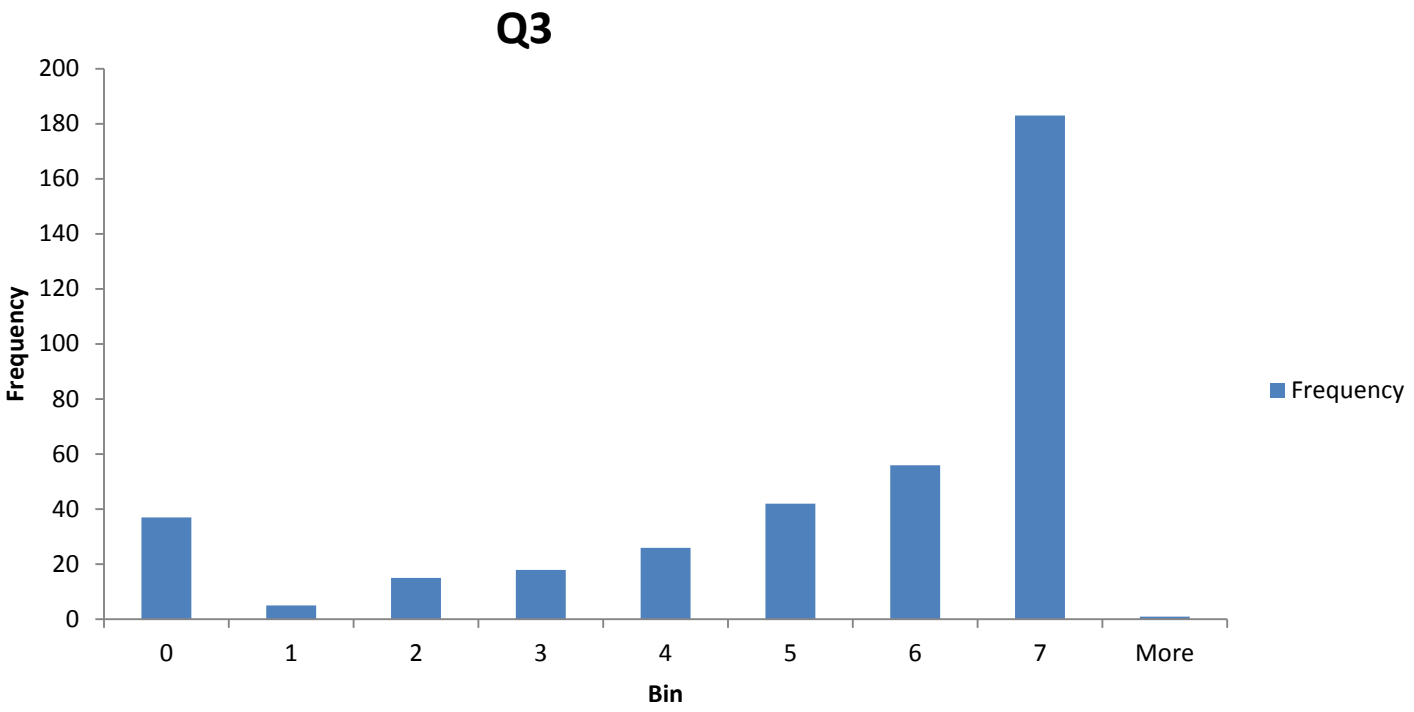
Question 3

```
def reverser(instring):
    outstring = “”
    while instring != "":
        c = instring[0]
        outstring = c + outstring
        instring = instring[1:]
    return outstring
```

```
def reverser_for(instring):
    outstring = ""
    for c in instring:
        outstring = c + outstring
    return outstring
```

Question 3

- Make sure you practice writing while loops



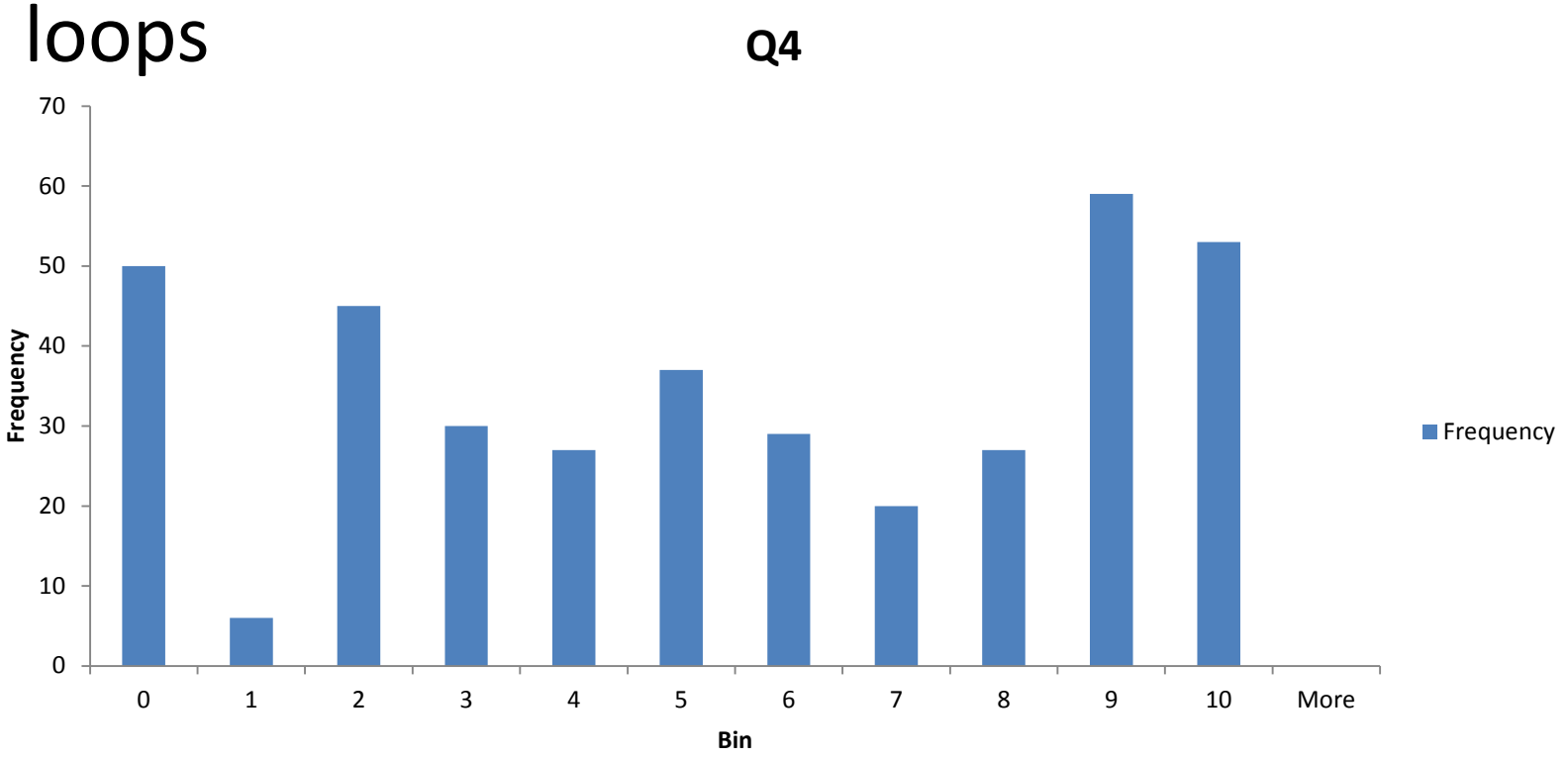
Question 4

```
def calculate_bill(prices, bill):
    (1)
    for item in (2)
        product = (3)
        price = (4)
        total += price * (5)
    return total
```

```
total = 0
bill:
item[0]
prices[product]
item[1]
```

Question 4

- A lot of people struggled with this!
- Practice your dictionaries and accumulator loops



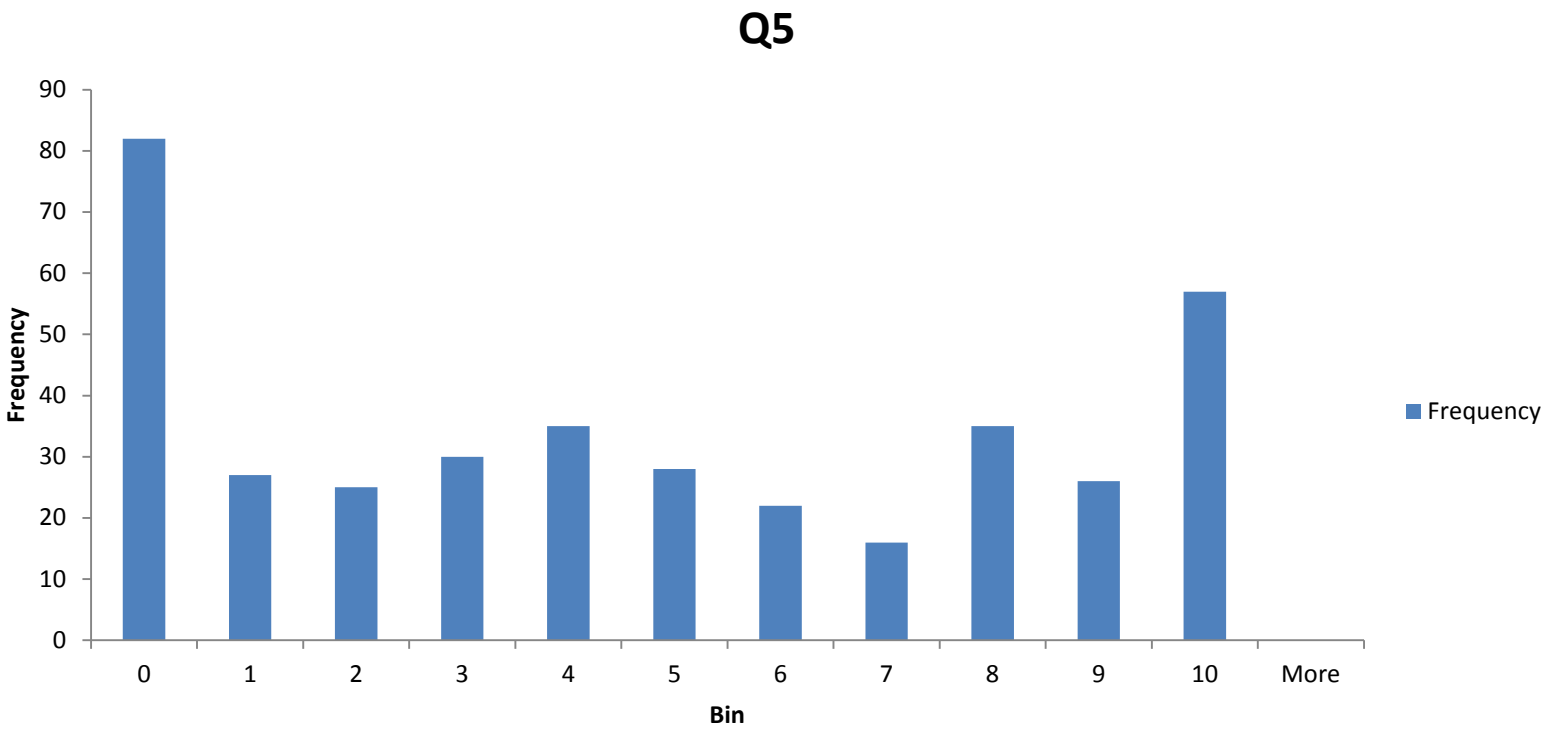
Question 5

```
>>> digital_root(678)
3
```

```
def digital_root(n):
    numstring = str(n)
    while len(numstring) > 1:
        total = 0
        for digit in numstring:
            total += int(digit)
        numstring = str(total)
    return int(numstring)
```

Question 5

This one was expected to be difficult



What to do…

- If you scored 36-45 you are well on track. Try building your skills on the harder problems, and make sure you can write code under exam conditions without making syntax errors
- If you scored 23-35 you are getting through, but still have some noticeable gaps in your skills. Identify the questions and worksheet problems where you have difficulty, make sure you have a thorough understanding, and keep practicing.

What to do…

If you scored 22 or less, don't panic.

(1) Do you understand all the basics – data types, iteration, functions

(2) Can you trace through the behaviour of a function, and find any logical errors

(3) Practice solving old tutorial questions, worksheets, project exercises, class exercises from the lectures, practice tests, and make a list of where you get stuck, and what you get wrong

(4) Focus on that list of your difficulties, and revise your notes, talk to your tutor (or the on-line tutor), post a question of the discussion forum or arrange to see Chris

(5) There are many ways we can help, but you need to act now to take control