

Aaron Klapheck .....	1
Problem 1.....	1
Problem 2.....	1
Problem 3.....	2
Problem 4.....	3

## Aaron Klapheck

57/60

```
% Quiz 4
clear, clc
Date = date
```

Date =

14-Nov-2007

### Problem 1.

```
load gol_fcartdata.txt
```

OK

```
matrix = gol_fcartdata
```

```
sel_l_more_than_60 = (matrix > 60) * (ones(21, 1))
```

why? How about using sum? OK

```
sel_l_less_than_60 = (matrix <= 60) * (ones(21, 1))
```

which weeks??? Use find() -3

matrix =

Columns 1 through 16

```
72    50    55    60    70    70    75    80    80    90    55    57    63    74    70
    49
```

Columns 17 through 21

```
51    66    60    62    79
```

sel\_l\_more\_than\_60 =

```
13
```

sel\_l\_less\_than\_60 =

```
8
```

### Problem 2

```
x = input('choose value of x (between 1 and 100): ');
```

OK

```
if (x >= 90) & (x <= 100)
    disp('letter grade of A')
elseif (80 <= x) & (x <= 89)
    disp('letter grade of B')
elseif (70 <= x) & (x <= 79)
    disp('letter grade of C')
elseif (60 <= x) & (x <= 69)
    disp('letter grade of D')
elseif (0 <= x) & (x < 60)
    disp('letter grade of F')
else
```

```
disp(' please choose value of x between 1 and 100' )
end %x >= 90
```

choose value of x (between 1 and 100): 93  
letter grade of A

choose value of x (between 1 and 100): 45  
letter grade of F

choose value of x (between 1 and 100): -4  
please choose value of x between 1 and 100

choose value of x (between 1 and 100): 132  
please choose value of x between 1 and 100

choose value of x (between 1 and 100): 78  
letter grade of C

nice

### **Problem 3.**

```
days = input(' days: ')
% for the next line of code: the input must be "weeks", "months", or OK
% "years", (spelling counts!).
method = input(' choose conversion of days to weeks, months, or years: ', 's')
switch method
    case 'weeks'
        week = days/7
    case 'months'
        month = days/30
    case 'years'
        year = days/365
    otherwise
        'for the method you must choose weeks, months, or years'
end %method
```

days: 1234

days =

1234

choose conversion of days to weeks, months, or years: >> weeks

method =

weeks

week =

176.2857

days: 1234

days =

1234

Choose conversion of days to weeks, months, or years: months

method =

months

month =

41.1333

days: 1234

days =

1234

Choose conversion of days to weeks, months, or years: years

method =

years

year =

3.3808

**OK**

#### **Problem 4.**

```
% Given:  
% V = 10^9 - (10^8)*(1 - exp(-t)/100) - 10^7*t,  
% where V is the volume of water (remaining) in liters and t is the time in  
% days.
```

```
for t = 1:75  
    V = 10^9 - (10^8)*(1 - exp(-t)/100) - 10^7*t;  
end %t = 1:75
```

**OK**

```
V_after_75_days = V
```

*V\_after\_75\_days =*

*150000000*