Before you turn this problem in, make sure everything runs as expected. First, **restart the kernel** (in the menubar, select Kernel→Restart) and then **run all cells** (in the menubar, select Cell→Run All).

Don't edit or remove the line `%%code` . remove the line contains `raise NotImplementedError()` and replace it by your code. follow the comments on the cell and use the same variables and constants as listed.

Make sure you fill in any place that says `YOUR CODE HERE` or "YOUR ANSWER HERE", as well as your name and ID below:

1 Assignemnt 1 - Part 2

1.1 ICS 104: Programming in Python and C

1.1.1 Term 201

In [1]:
```
#don't modify the content of this cell just run it
from IPython.core.magic import (register_line_magic,
                                register_cell_magic)
_store = {}
ip = get_ipython()
@register_cell_magic
def code(line, cell):
    _store[line.strip()]=cell
    ip.run_cell(cell)
```

1.2 Question1

A passenger transport company has two type of vehicles. The small cars can carry 4 passengers and the large cars can carry 7. Large cars are more economical than small cars. The company wants to purchase a program that can calculate the minimum number of required vehicle if they enter the total number of passengers. Write a python program that takes the total number of passengers and prints the minimum number of small and large vehicles required to transport all the passengers. A sample run is shown below:

```
Enter number of passengers: 100
You need 14 large cars and 1 small car.
```

In [2]:
```
%%code q01
#write the answer to the First programming question question here using the following variables
numPassengers = int(input("Enter number of passengers: "))
#...
numLargeCars = numPassengers // 7

numSmallCars = round(((numPassengers%numLargeCars) / 4)+0.5)
# YOUR CODE HERE
print("You need",numLargeCars,"large cars and",numSmallCars,"small car.")
```

```
Enter number of passengers: 133
You need 19 large cars and 0 small car.
```

In [ ]:
```

```

In [ ]:
```

```

In [ ]:
```

```

In [ ]:
```

```

In [ ]:
```

```

1.3 Question2

2. Write a complete Python program that reads the number of seconds from the user. The program then computes the number of days, hours, minutes, and remaining seconds. The following is a sample run of the program.

```
Enter number of seconds: 100 sec
Number of days: 0
Number of hours: 0
Number of minutes: 1
Number of remaining seconds: 40
```

In [3]:
```
%%code q02
#write the answer to the Second programming question question here using the following variables
# # ---> 4 pts
nSecs = int(input("Enter number of seconds: "))

# # ---> 6 pts
# # Define the following constants
Total_Secs_In_Day = 86400
Total_Secs_In_Hour =3600
Total_Secs_In_Minute = 60

# # ---> 5 pts
nDays = nSecs // Total_Secs_In_Day

# # ---> 10 pts
nHours  = (nSecs % Total_Secs_In_Day) // Total_Secs_In_Hour

# # ---> 10 pts
nMinutes = ((nSecs % Total_Secs_In_Day)%Total_Secs_In_Hour)// Total_Secs_In_Minute
# ---> 5 pts
remSecs = nSecs % Total_Secs_In_Minute
# YOUR CODE HERE
print("Number of days:",nDays)
print("Number of hours:",nHours)
print("Number of minutes:",nMinutes)
print("Number of remaining seconds:",remSecs)

```

```
Enter number of seconds: 100
Number of days: 0
Number of hours: 0
Number of minutes: 1
Number of remaining seconds: 40
```

In [ ]:
```
1
```

In [ ]:
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1
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In [ ]:
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1
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In [ ]:
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1
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In [ ]:
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1
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In [ ]:
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1
```