

# ITPACT

## Assignment May 18, 2020

### Note:

The below assignment is a fun family activity that should be done with parents' involvement.

### Questions:

1. Find three examples each of *abstraction* and *interfaces* around you.
2. Prepare your one day's schedule using the following approach:
  1. Identify 5-6 broad categories of activities that you would like to do in a day: e.g. creative, fitness, entertainment etc.
  2. Identify 3-5 activities each of these categories. For example, in creative, we have drawing, singing, playing musical instruments, crafts, writing etc.
  3. Allocate an appropriate number of hours to be given in a day to each of the categories identified above.
  4. Divide your day into one-hourly or half-hourly slots starting from 9 AM going through to 6 PM.
  5. Schedule activities in each of these slots. Ensure that each category above gets the number of hours you have assigned to it.
  6. Ensure that at least one hour in all should be joint activity with your parents. Interface with their schedule through their free slots.

### Note:

1. Vigyan's schedule (fictitious anyway) is provided herewith as a reference. However, you should make your schedule as per your taste and need.
2. Submit your answer in a file named `schedule.xls`.
3. Observe the working of your household:
  1. What are the most important 4-5 'departments' of your household.
  2. How do your parents divide the work?
  3. Please indicate the examples of coordination between them through interfacing.
  4. Optional question: What is your role in the above organisation?

**Note:**

1. Submit your answer in a file named `family.doc`.
4. The program `friends.py` is provided herewith. Modify the program to accept the contributions from each friend (Amar, Akbar and Anthony) as inputs from the user. The interaction with the modified program should be as follows (text in **red** are output printed by the program; text in **blue** are input typed by the user.):

```
Enter Amar's contribution: 1000
Enter Akbar's contribution: 500
Enter Anthony's contribution: 300
Total expenditure = 1800
Average expenditure per person = 600.0
Amar owes -400.0
Akbar owes 100.0
Anthony owes 300.0
```

**Hint:** The command for accepting numbers as input is: `x = int(input("..."))`.