**Problems: CS141**

**(1)**

**Write an algorithm to search a phone book for a person’s number**

**What materials do you need?**

**What steps would you take?**

**State any assumptions you are making**

**Materials:**

Phone book

**Steps:**

1.1 Go to the press where the phone book is located

1.2 Open the press

1.3 Retrieve the phone book from the press

1.4 Close the press

2.1 Put the phone book on the table

2.2 Open the phone book

(Find the name James Smith)

3.3 Go to the section of the phone book with the surnames that begin with the letter ‘S’

3.4 When you are there, follow alphabetically to ‘Sm’ - ‘Smi’ – ‘Smit’ – ‘Smith’

3.5 Find the correct address which corresponds to the person.

3.6 You have found the persons number.

**Assumptions:**

* We assume that the person has a phone book.
* We assume that they are accessible and are able to read.