

# Logic Programming

## Assignment 7

### Due: Next Section.

Note: This task is individual task, The lab Instructor should evaluate a running program for it.

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### 1. (5 Points) Explain in words what the following program does:

```
rep.  
rep :- rep.  
  
run :-  
    rep,  
    write('Try to guess the secret number'),  
    nl,  
    read(42),  
    write("Congrats!"),  
    nl,  
    write('Sorry, wanted to say: Congrats!').
```

### 2. (5 Points) Write a prolog program `change_case` to read a character and convert into its opposite case. Simple example:

```
?- change_case.
```

```
Enter a letter:
```

```
:| B
```

```
B
```

```
?- change_case.
```

```
Enter a letter:
```

```
:| d
```

```
D
```

### 3. (5 Points) Write a prolog program `copy_f(F,Fcopy)` to copy a text file in `F` to another text file in `Fcopy`.

**4. (5 Points) Write a prolog program tokenizer(File, L) to read the contents of a text file and return a list of all unique tokens without repetition . Simple example:**

Suppose: c:\file.txt contains:

“Instead of wishing you were someone else, be proud of who you are, you never know who’s been looking at you wishing they could be you”.

?- tokenizer('c:\\filename.txt', L).

L= {'Insead', 'of', 'wishing', 'you', 'were', 'someone', 'else,', 'be', 'proud', 'who', 'never', 'know', 'who's', 'been', 'looking', 'at', 'wishing', 'they', 'could'}