COMP 412
Spring 2014
Written Homework #1

Due date : March 17, 2014

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1. For each of the following specifications in lex, give a regular expression that describes the language of possible outputs. Assume that the alphabet for all input strings ∑ = {a,A,b,B}.

i) Specification 1:

```
[aA]                    {printf("x");}
[aA][aA]                {printf("y");}
[bB]                    {printf("z");}
```

ii) Specification 2:

```
[aA][bB]                {printf("p");}
([aA]+)([bB]+)          {printf("q");}
[aA]                    {printf("r");}
[bB]                    {printf("s");}
```