

Programming Language and Compiler Design  
Lab Assignment Week 6

Q1. Write specification to handle the case of languages in which keywords are not reserve words, i.e. keywords can be used as identifiers also. Implement your specifications through LEX and verify for a given program text.

For Example

```
int int=8;
First int is keyword
Second int is identifier.
```

```
if(x==4) then if (y==0) then if=78 else if=56
first and second occurence of if is keywords
then is keywords
else is keywords
Third and Fourth occurence is identifier
```

Q2. Write specification to handle the case to ignore identifiers, keywords, numbers etc from string literals. Implement your specifications through LEX and verify for a given program text.

For Example

```
printf("int is %d value of float is %f",i,j);
int is not keyword, not identifier
is Not identifier
i is identifier
j is identifier.
```

Q3. Write specification to identify unary and binary operator, operators subset of other operators. Implement your specifications through LEX and verify for a given program text.

For Example

x=-a-b;	- unary    second - is binary
x=a++ + ++b;	++ unary    + binary
x=a++++++b;	++++++ error