HW01) Find regular Exp. Of outputted Language?

```
%{
#include <stdio.h>
%}
/* regular definitions */
letter [A-Za-z]
uletter[A-Z]
x       {uletter}+{letter}*
y       {letter}{uletter}
z       {letter}*
%%
{x}     {printf("1"); return(1);}
{y}     {printf("2"); return(2);}
{z}     {printf("3"); return(3);}
%%
main()
{yylex();}
```

HW02)
Write the regular definitions and the correspondent FLEX program for recognizing a subset of the URL.
Examples of valid URL:
http://www.muclub.edu/Fic.html
ftp://190.169.9.71/excer.txt
http://site.rucog.com/%7cock/toc.html#ref1
https://ww.wiki.news:8181/local/

.....
HW03)
Write a scannar using Flex which, given one or more C sources as input, recognizes all the language elements and produces as output an HTML file where each element results highlighted with a different color.
Example:

Input file name: "in.c"

```
#include <stdio.h>
int notEq(int i) {
if (i==1) return 1;
/* if not equals 1 */
else return 0;
}
```

```
in.c
#include <stdio.h>
int prova( int i)
{
if (i==1) return 1;
/* if not equals 1 */
else return 0;
}
```