

- **Sample 2:** print out ABA when matching aba in the file, print out AB+A when matching ab+a in the file, and print out the number of aba in the input file.

```

/**
 * Read in from a specified file,
 * print out ABA when matching aba in the file,
 * print out AB+A when matching ab+a in the file,
 * and print out the number of aba in the file.
 *
 * Note: swapping line 18 and 19 will give an incorrect result as
 * rules are executed in the order they defined in the file.
 *
 * flex -o test.yy.c test.yy
 * gcc -o test test.yy.c -ll
 */

int count = 0;

%%

^aba$      { printf("ABA"); count++;}
^ab+a$     { printf("AB+A"); }
.          { printf("%s", yytext);}

%%
int main( int argc, char *argv[] ) {

    if (argc > 1)
        yyin = fopen( argv[1], "r" ); //where yylex reads its input

    yylex(); // a function of flex that read input till it is exhausted
    printf("\nThere are %d aba in the file.\n", count);
    return 0;
}

```

input.txt

```

aba
abba
abbba
abbbba
aba
abbac
caba

```

output

```

mbp-190250:flex yingli$ flex -o test.yy.c test.yy
mbp-190250:flex yingli$ gcc -o test test.yy.c -ll
mbp-190250:flex yingli$ ./test input.txt
ABA
AB+A
AB+A
AB+A
ABA
abbac
caba

There are 2 aba in the file.
mbp-190250:flex yingli$

```