

Day 1:

```
1.)%{  
%}  
%%  
[A-Z] {printf("%c",yytext[0]);}  
. {}  
%%  
int yywrap(){}  
int main()  
{  
printf("Enter the string:");  
yylex();  
}
```

```
Command Prompt - a.exe
Microsoft Windows [Version 10.0.19045.4412]
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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex capitalword.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe

enter the string:ThaRun
TR
```

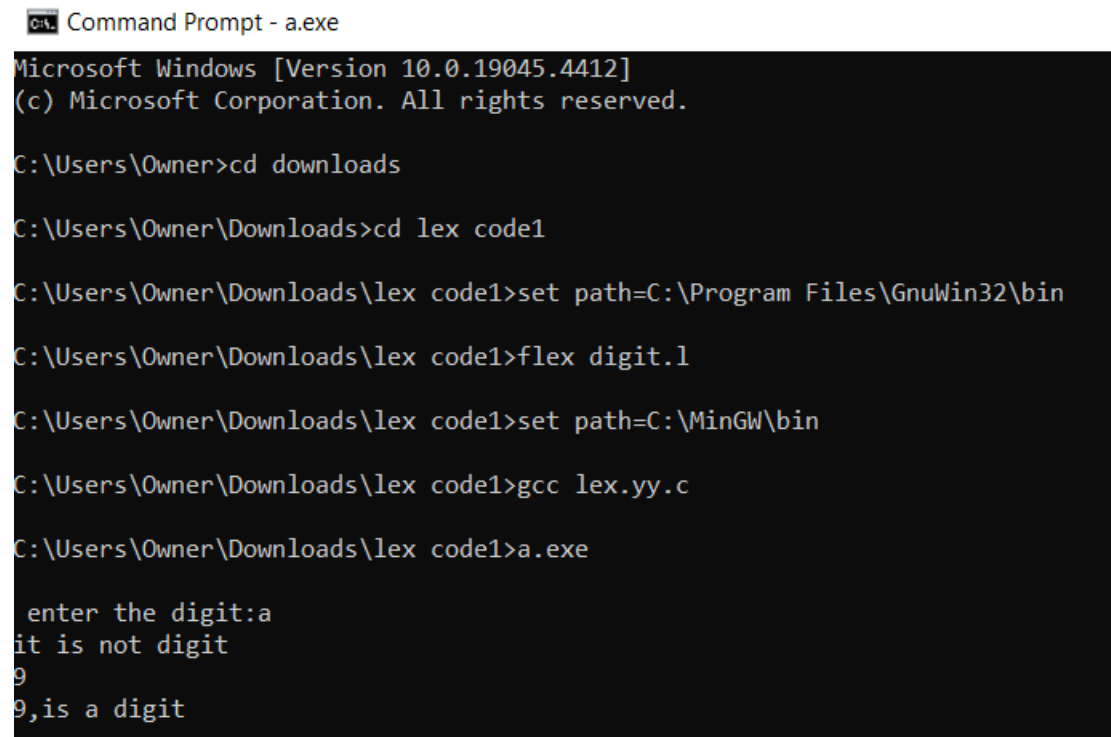
```
2.)
%{
#include<stdio.h>
%}
%%
[0-9]+ {printf("%s,is a digit",yytext);}
.+ {printf("it is not digit");}
%%
int main()
{
printf("\n enter the digit:");
```

```

yylex();
}

int yywrap()
{
return 1;
}

```



The screenshot shows a Windows Command Prompt window titled "Command Prompt - a.exe". The text inside the window is as follows:

```

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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex digit.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe

enter the digit:a
it is not digit
9
9,is a digit

```

```

3.)%%
[1-9][0-9]{9} {printf("¥nmobile number is valide:");}
.+ {printf("¥nmobile number is invalide:");}
%%

int main()
{

```

```
printf("enter the number:");
```

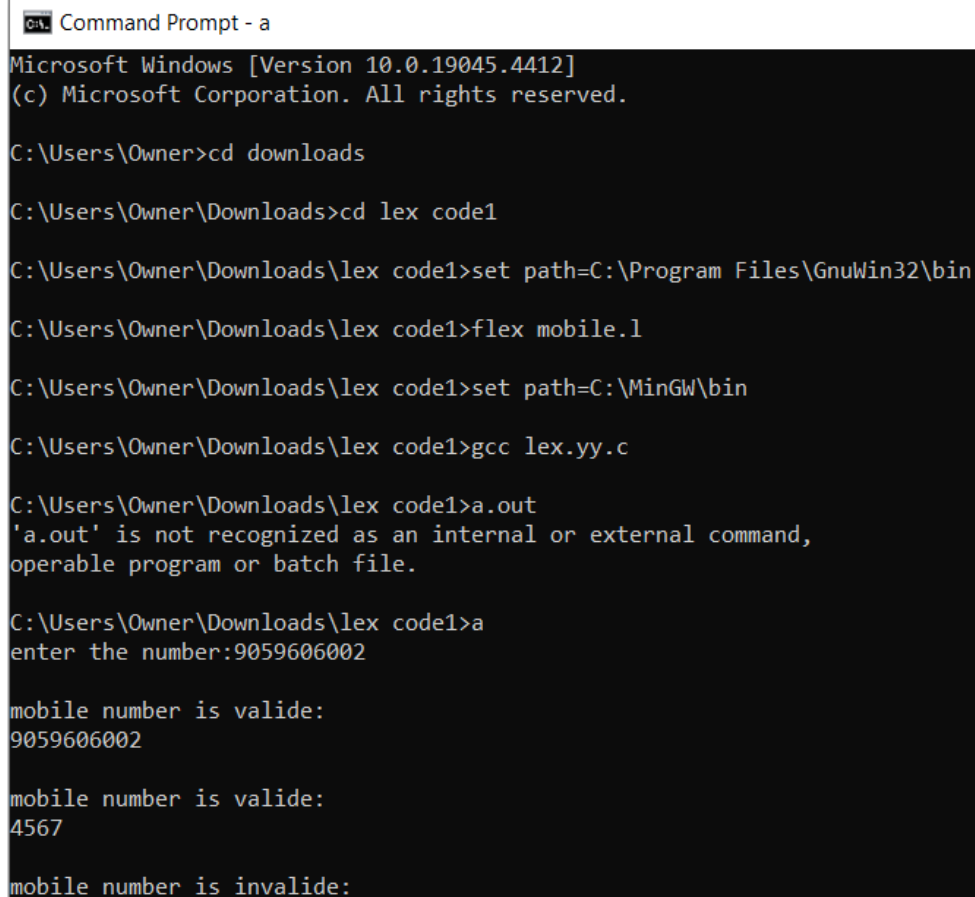
```
yylex();
```

```
return 0;
```

```
}
```

```
int yywrap()
```

```
{}
```



```
Command Prompt - a
Microsoft Windows [Version 10.0.19045.4412]
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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex mobile.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.out
'a.out' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Owner\Downloads\lex code1>a
enter the number:9059606002

mobile number is valide:
9059606002

mobile number is valide:
4567

mobile number is invalide:
```

```
4.)%{
```

```
int vow_count=0;
```

```
int const_count=0;
```

```
%}
```

%%

[aeiouAEIOU] {vow_count++;}

[a-zA-Z] {const_count++;}

%%

**int yywrap(){}
int main()**

{

printf("enter the string of vowels and consonents:");

yylex();

printf("number of vowels are:%d\n",vow_count);

printf("number of consonents are:%d\n",const_count);

return 0;

}

```
Cit Select Command Prompt
Microsoft Windows [Version 10.0.19045.4412]
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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin
C:\Users\Owner\Downloads\lex code1>flex vc.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe
enter the string of vowels and consonents:tharun

^Z
number of vowels are:2
number of consonents are:4

C:\Users\Owner\Downloads\lex code1>
```

5.)

%{

%}

%%

[a-zA-Z][a-zA-Z0-9]+ {printf("%n is identifier",yytext);}

.+ {printf("%n%s is Keyword",yytext);}

%%

int yywrap(){}

int main()

{

printf("Enter the input:");

yylex();

}

```
Command Prompt - a.exe
Microsoft Windows [Version 10.0.19045.4412]
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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex identifier.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe
Enter the input:tharun

    is identifier
if

    is identifier
if and else

if and else is Keyword
```

6.)%{

int positive_count = 0;

int negative_count = 0;

%}

DIGIT [0-9]

SIGN [-+]

%%

```
{SIGN}?{DIGIT}+      {  
    int num = atoi(yytext);  
    if (num > 0)  
        positive_count++;  
    else if (num < 0)  
        negative_count++;  
    }  
  
.*\n                ; /* ignore any other characters */
```

%%

```
int yywrap() {  
    return 1; // Indicate end of input  
}
```

```
int main(int argc, char **argv) {  
    yylex();  
    printf("Positive numbers count: %d\n", positive_count);  
    printf("Negative numbers count: %d\n", negative_count);  
    return 0;  
}
```



```
Command Prompt
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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex posneg.l

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe
2
^Z
Positive numbers count: 1
Negative numbers count: 0

C:\Users\Owner\Downloads\lex code1>a.exe
2 3 -4 -3 8 9 -1
^Z
Positive numbers count: 4
Negative numbers count: 3

C:\Users\Owner\Downloads\lex code1>
```

8.)%{

#include <stdio.h>

%}

VOWEL [aeiouAEIOU]

LETTER [a-zA-Z]

%%

{VOWEL}{LETTER}* { printf("Valid string: %s\n", yytext); }

```
.|¥n ; /* ignore any other characters */
```

```
%%
```

```
int yywrap() {  
    return 1; // Indicate end of input  
}
```

```
int main(int argc, char **argv) {  
    printf("Enter a string: ");  
    yylex();  
    return 0;  
}
```

Command Prompt - a.exe

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C:\Users\Owner>cd downloads

C:\Users\Owner\Downloads>cd lex code1

C:\Users\Owner\Downloads\lex code1>set path=C:\Program Files\GnuWin32\bin

C:\Users\Owner\Downloads\lex code1>flex startstring.l

C:\Users\Owner\Downloads\lex code1>set path=

C:\Users\Owner\Downloads\lex code1>set path=C:\MinGW\bin

C:\Users\Owner\Downloads\lex code1>gcc lex.yy.c

C:\Users\Owner\Downloads\lex code1>a.exe

Enter a string: arun

Valid string: arun

tharun

Valid string: arun

tharun

Valid string: arun

^Z

C:\Users\Owner\Downloads\lex code1>a.exe

Enter a string: tharun

Valid string: arun

