Faculty of Technology and Engineering

Computer Science and Engineering

Practical

Academic Year	:	2025-26	Semester	:	6
Course code	:	CSE312	Course name	:	Design of language processing

Practical - 4

Aim:

1. **Objective 3:** Write a program which validate the password as per given rules.

   - length can be 9 to 15 characters
   - includes lower case letter, upper case letter, digit, symbols (*, ; # $ @)
   - minimum count for each category must be one

2. **Program (Code)**

   %{

   #include <stdio.h>

   #include <string.h>

   #include <ctype.h>

   int has_lower = 0, has_upper = 0, has_digit = 0, has_special = 0;

   char password[100];

   int pwd_len = 0;

   %}

   %%

   [a-z]   { password[pwd_len++] = yytext[0]; has_lower = 1; }

   [A-Z]   { password[pwd_len++] = yytext[0]; has_upper = 1; }

   [0-9]   { password[pwd_len++] = yytext[0]; has_digit = 1; }

   [*,;#$@]   { password[pwd_len++] = yytext[0]; has_special = 1; }

   \n   { password[pwd_len] = '\0'; return 0; }

```
.        { password[pwd_len++] = yytext[0]; }
%%

int yywrap() {
    return 1;
}

int main() {
    // printf("Enter password:\n");
    yylex();

    int valid = 1;

    // Check length (9 to 15 characters)
    if (pwd_len < 9 || pwd_len > 15) {
        valid = 0;
    }

    // Check minimum count for each category
    if (!has_lower || !has_upper || !has_digit || !has_special) {
        valid = 0;
    }

    if (valid) {
        printf("Valid password\n");
    } else {
        printf("Invalid password\n");
    }

    return 0;
}
```

3. **Output (Screen Shot)**

```
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "a@1T" | ./objective4
Invalid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "Passw0rd@123" | ./objective4
Valid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "MyP@ssw0rd99" | ./objective4
Valid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "password@123" | ./objective4
Invalid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "Password123" | ./objective4
Invalid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "VeryLongPassword@12345" | ./objective4
Invalid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "Password@Only" | ./objective4
Invalid password
> debdootmanna@Mac.mshome.net  ~ > College > Sem 6 by college > DLP > 4  main
> echo "PASSWORD@123" | ./objective4
Invalid password
```