

CTYPE FUNCTIONS

Exercise:

```
1) char pw[16];
   int c1=0, c2=0, c3=0, c4=0, c5=0, i;
   printf("Enter password : ");
   scanf("%[^\\n]", pw);
   if(strlen(pw)>=10 && strlen(pw)<=15)
       c1=1;
   else if(strlen(pw)<10)
       printf("Password too short!\\n");
   else
       printf("Password too long!\\n");

   for(i=0; pw[i]!='\\0'; i++)
       if(islower(pw[i]))
       {
           c2=1;
           break;
       }

   for(i=0; pw[i]!='\\0'; i++)
       if(isupper(pw[i]))
       {
           c3=1;
           break;
```

```

    }

    for(i=0; pw[i]!='\0'; i++)
        if(pw[i]=='@' || pw[i]=='#' || pw[i]=='$' || pw[i]=='%'
            || pw[i]=='^' || pw[i]=='&' || pw[i]=='*')
        {
            c4=1;
            break;
        }

    for(i=0; pw[i]!='\0'; i++)
        if(isdigit(pw[i]))
        {
            c5=1;
            break;
        }

    if(c1 && c2 && c3 && c4 && c5)
        printf("Password accepted!");
    else
        printf("Password requirements don't match!");

```

Aptitude Questions:

- 1) True
- 2) True
- 3) False

4) Differences between `islower()` and `tolower()`.

islower()	tolower()
1) It is used to check whether a character in consideration is in lower case or not.	1) It is used to convert the character in consideration to lower case.
2) It returns zero or a non-zero value.	2) It returns the character in lower case.

5) False