Perl Scripts

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Create a text file and answer the following queries :
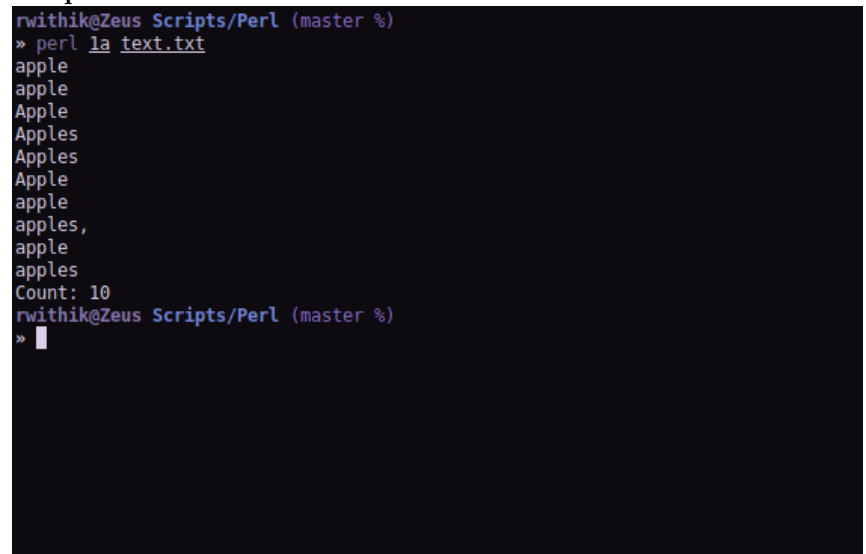
1. Search for the pattern 'apple' in the file and display the number of occurences.

   Script:

```perl
#!/bin/perl

my $count = 0;
while(my $line = <>){
    for (split ' ', $line) {
        if ($_ =~ /apple/i){
            printf("%s\n", $_);
            $count++;
        }
    }
}
printf("Count: %d\n", $count);
```

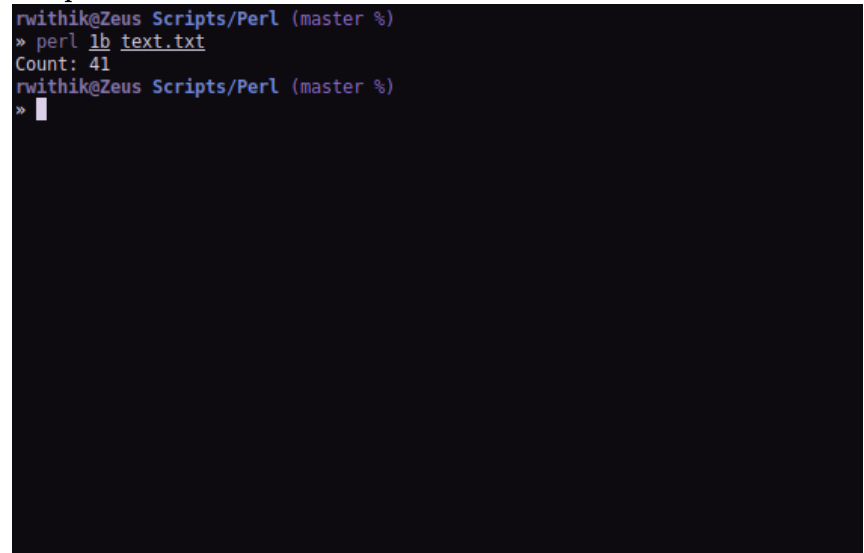   **Output:**

2. Count the number of words that ends with 'e'

   Script:

   ```perl
   #!/bin/perl

   my $count = 0;
   while(my $line = <>){
       for (split ' ', $line) {
           $count++ if $_ =~ /e$/i;
       }
   }
   printf("Count: %d\n", $count);
   ```

   Output:

   ```
   rwithik@Zeus Scripts/Perl (master %)
   » perl 1b text.txt
   Count: 41
   rwithik@Zeus Scripts/Perl (master %)
   »
   ```

3. Count the number of words that starts with 'ap'

   Script:

   ```perl
   #!/bin/perl

   my $count = 0;
   while(my $line = <>){
       for (split ' ', $line) {
               $count++ if $_ =~ /^ap/i;
       }
   }
   printf("Count: %d\n", $count);
   ```

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Output:

```
rwithik@Zeus Scripts/Perl (master %)
» perl lc text.txt
Count: 10
rwithik@Zeus Scripts/Perl (master %)
»
```

4. Search for words containing 'a' or 's'

   Script:

   ```perl
   #!/bin/perl

   my $count = 0;
   while(my $line = <>){
       for (split ' ', $line) {
           if ($_ =~ /.*[as].*/i){
               printf("$_\n");
               $count++;
           }
       }
   }
   printf("Count: %d\n", $count);
   ```

Output:

```
a
organic
and
non-organic
means.
fruit's
was
sequenced
as
part
research
disease
and
selective
apple
apples
was
tonnes,
China
accounting
total.
Count: 115
rwithik@Zeus Scripts/Perl (master %)
»
```

5. Search for words containing zero or more occurrence of 'e'

   Script:

```perl
#!/bin/perl

my $count = 0;
while(my $line = <>){
    for (split ' ', $line) {
        if ($_ =~ /e*/i){
            printf("%s\n", $_);
            $count++;
        }
    }
}
printf("Count: %d\n", $count);
```

4

Output:

```
in
apple
production.
Worldwide
production
of
apples
in
2017
was
83.1
million
tonnes,
with
China
accounting
for
49.8%
of
the
total.
Count: 204
rwithik@Zeus Scripts/Perl (master %)
»
```

6. Search for words containing one or more occurrence of 'e'

   Script:

```perl
#!/bin/perl

my $count = 0;
while(my $line = <>){
    for (split ' ', $line) {
        if ($_ =~ /e+/i){
            printf("%s\n", $_);
            $count++;
        }
    }
}
printf("Count: %d\n", $count);
```

Output:

```
prone
number
bacterial
pest
problems,
be
controlled
number
means.
the
genome
sequenced
research
disease
selective
breeding
apple
Worldwide
apples
tonnes,
the
Count: 92
rwithik@Zeus Scripts/Perl (master %)
»
```

7. Search for words containing the letters 'l' and 'm', with any number of characters in between

   Script:

```perl
#!/bin/perl

my $count = 0;
while(my $line = <>){
    for (split ' ', $line) {
        if ($_ =~ /l.+m/i){
            printf("%s\n", $_);
            $count++;
        }
    }
}
printf("Count: %d\n", $count);
```

Output:

```
rwithik@Zeus Scripts/Perl (master %)
» perl 1g text.txt
problems,
Count: 1
rwithik@Zeus Scripts/Perl (master %)
»
```

The text file used in the above screenshots:


```
rwithik@Zeus Scripts/Perl (master %)
» cat text.txt
An apple is a sweet, edible fruit produced by an apple tree (Malus pumila). Appl
e trees are cultivated worldwide and are the most widely grown species in the ge
nus Malus. The tree originated in Central Asia, where its wild ancestor, Malus s
ieversii, is still found today. Apples have been grown for thousands of years in
 Asia and Europe and were brought to North America by European colonists. Apples
 have religious and mythological significance in many cultures, including Norse,
 Greek and European Christian traditions.

Apple trees are large if grown from seed. Generally, apple cultivars are propaga
ted by grafting onto rootstocks, which control the size of the resulting tree. T
here are more than 7,500 known cultivars of apples, resulting in a range of desi
red characteristics. Different cultivars are bred for various tastes and use, in
cluding cooking, eating raw and cider production. Trees and fruit are prone to a
 number of fungal, bacterial and pest problems, which can be controlled by a num
ber of organic and non-organic means. In 2010, the fruit's genome was sequenced
as part of research on disease control and selective breeding in apple productio
n.

Worldwide production of apples in 2017 was 83.1 million tonnes, with China accou
nting for 49.8% of the total.
rwithik@Zeus Scripts/Perl (master %)
»
```