Ex 8 Basic Perl Programming

Date: 03.11.2020

Aim:

To study and implement the basic Perl programming.

Description

Perl is a programming language developed by Larry Wall, specially designed for text processing. It stands for Practical Extraction and Report Language. It runs on a variety of platforms, such as Windows, Mac OS, and the various versions of UNIX. This tutorial provides a complete understanding of Perl.

Perl Features

- Perl takes the best features from other languages, such as C, awk, sed, sh, and BASIC, among others.
- Perl's database integration interface DBI supports third-party databases including Oracle, Sybase, Postgres, MySQL, and others.
- Perl works with HTML, XML, and other mark-up languages.
- Perl supports Unicode.
- Perl is Y2K compliant.
- Perl supports both procedural and object-oriented programming.
- Perl interfaces with external C/C++ libraries through XS or SWIG.
- Perl is extensible. There are over 20,000 third-party modules available from the Comprehensive Perl Archive Network.
- The Perl interpreter can be embedded into other systems.

Exercise

1. Perform arithmetic operations using Perl

Source Code :

```
print "enter 2 numbers\n";
$a = <STDIN>;
$b = <STDIN>;
$c = $a + $b;
print 'Value of $a + $b = ' . $c . "\n";

$c = $a - $b;
print 'Value of $a - $b = ' . $c . "\n";

$c = $a * $b;
print 'Value of $a * $b = ' . $c . "\n";

$c = $a / $b;
print 'Value of $a / $b = ' . $c . "\n";

$c = $a % $b;
print 'Value of $a % $b = ' . $c. "\n";
```

Output :

```
$perl main.pl
enter 2 numbers
Value of $a + $b = 30
Value of $a - $b = 10
Value of $a * $b = 200
Value of $a / $b = 2
Value of $a % $b = 0
```

2. Demonstrate all the escape sequences using print and say statements.

Source Code :

```
print("Displaying text \n in new line by using \\n. \n");
print("Displaying text \t in new tab by using \\t. \n");
print("\"Printing in double quotes.\"\n");
print("\'Printing in single quotes.\'\n");
```

```
print("\L printing text in lower case.\n");
print("\U PRINTING TEXT IN UPPER CASE.\n");
```

Output :

```
$perl main.pl
Displaying text
 in new line by using \n.
Displaying text          in new tab by using \t.
"Printing in double quotes."
'Printing in single quotes.'
 printing text in lower case.
 PRINTING TEXT IN UPPER CASE.
```

3. Online shopping application.

Source Code :

```
print("Enter the item:\n 1.Air conditioner(40k) \n 2.telivision(30k) \n 3.Refrigerator(20k) \n 4.Air cooler(15k) \n");
$c = <STDIN>;
print("Enter quantity\n");
$a = <STDIN>;
if ($c ==1)
{
  $cost = $a * 40000;
  print("cost of Air conditioner: Rs $cost\n");
}
elsif ($c ==2)
{
  $cost = $a * 30000;
  print("cost of telivision: Rs $cost\n");
}
elsif($c ==3)
{
  $cost = $a * 20000;
  print("cost of Refrigerator: Rs $cost\n");
}
elsif($c ==4)
{
  $cost = $a * 15000;
  print("cost of Air cooler: Rs $cost\n");
}
```

```
else
{

  print("Invalid option");
}
```

Output :

```
$perl main.pl
Enter the item:
 1.Air conditioner(40k)
 2.telivision(30k)
 3.Refrigerator(20k)
 4.Air cooler(15k)
Enter quantity
cost of Refrigerator: Rs 20000
```

```
$perl main.pl
Enter the item:
 1.Air conditioner(40k)
 2.telivision(30k)
 3.Refrigerator(20k)
 4.Air cooler(15k)
Enter quantity
cost of telivision: Rs 90000
```

4.Demonstrate arithmetic assignment operators in Perl.

Source Code :

```
print("Enter a value\n");

$a = <STDIN>;

print("Enter Increment value\n");

$b = <STDIN>;

$b += $a;
```

```
print("Using increment assignment operator $b\n");

print("Enter decrement value\n");

$b = <STDIN>;

$b -= $a;

print("Using decrement assignment operator $b\n");

print("Enter Multiply value\n");

$b = <STDIN>;

$b *= $a;

print("Using multiplication assignment operator $b\n");

print("Enter division value\n");

$b = <STDIN>;

$b /= $a;

print("Using division assignment operator $b\n");

print("Enter modulus value\n");

$b = <STDIN>;

$b %= $a;

print("Using modulus assignment operator $b\n");
```

Output :

```
$perl main.pl
Enter a value
Enter Increment value
Using increment assignment operator 13
Enter decrement value
Using decrement assignment operator -6
Enter Multiply value
Using multiplication assignment operator 60
Enter division value
Using division assignment operator 1
Enter modulus value
Using modulus assignment operator 8
```

Results:

The study and implementation of basic Perl programming are studied and executed.

Video : https://youtu.be/kq5J5Vj8zHs