INTRODUCTION TO LINUX

LECTURE (11)

Elzahraa Hasan

Agenda

- What is Perl

- Adv. Disadv Perl

- Perl vs shell

- examples

What is Perl

- Perl is a general-purpose programming language.

- It was developed for text manipulation and is now used for a wide range of tasks including system administration, web development, network programming, code generation and more.

In Linux operating system:

- Creating programs

- Handel database

- GUI development

- Network administration

Perl-pros/cons

- Quick development phases

- Open source, free licensing

- Excellent text handling

- Fast for an interpreted language

- Very easy to write powerful programming

- Looks complicated if you are not familiar with regular expressions

Perl vs shell

Shell Script	Perl
Shell script is a dependent platform only for Unix OS.	Perl is OS independent.
Shell script is a scripting language.	Perl is a programming language.
Scripting language need not be compliled.	Perl compiles the program before executing the script.
Shell Scripting using one or more built-in scripting languages.	Perl using only one scripting language.

Perl is better because

- Perl does not cause portability issues

- Error handling is easier

- Write complex programs is easy

- Shell has fewer reusable libraries available compared to Perl

- Shell does not allow object inheritance ..etc

Steps to create a Perl file

1. Create a file using any editor

2. Name script file with extinction name.pl

3. Start the script with #!/usr/bin/perl

4. Write some code, then save

5. Run the script Perl name.pl

example

Create a file hello.pl

```perl
#!/usr/bin/perl


print( "What is your name?" );
$name=<STDIN>;
print("Thank you $name");
```

exercise

- Write if-else statement, to print out whether you passed the test or failed.

- You have to ask the student to enter his grade then check, if greater then 60, he passes otherwise, he failed

Solution

```perl
#!/usr/bin/perl


print("What is your grade?");
$a=<STDIN>;
if($a>60){
print(" you passed the test");
}else{
print("you failed !");
}
```
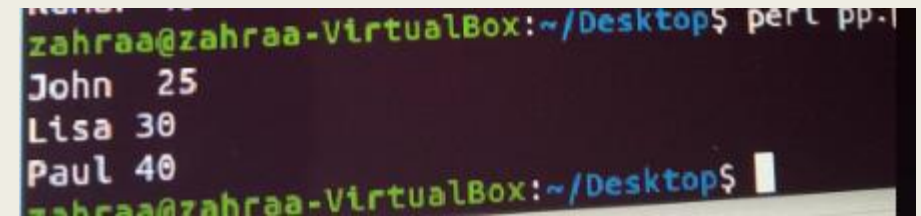
Array example

```perl
@ages = (25, 30, 40);

@names = ("John ", "Lisa", "Paul");


for ($i=0; $i<=2; $i++){

print($names[$i]," " , $ages[$i], "\n");

}
```

exercise

create two arrays that contain the name of 3 subjects and the grade which is out of 20

And post every subject with the grade as out of 100 in a separate line.

sudo

- To add a user

If you are the root➔   # adduser Ali

If you are not➔ $ sudo adduser Ali

- Remove user

If you are the root➔   # userdel Ali

If you are not➔ $ sudo userdel Ali

Sudo helps to run as a root