Day 2

Programming constructs

Bash shell syntax and constructs
i) The shbang line
The shbang line is the very first line of the script and lets the kernel know what shell will be interpreting the lines in the script.

It consists of #! followed by full path name
Example
#!/bin/bash

→ Comments
comments are descriptive material preceded by a
sign
Example
This is a comment

→ Local variables
Local variables are in scope for the current shell variables when a script ends they are no longer available i.e they go out of the scope.

Local variables can be defined with built-in declare function
Eg: variable_name = value
declare · variable_name = value

name = "Basu"
x = 5

→ Global variables

Global variables are called environment variables and are created with the export built-in command.

They are set for currently running shell and any process spawned from that shell.

The built-in declare function with the -x option also sets an environment variable and marks it for export

Eg: ♭ export VARIABLE_NAME = value
    declare -x VARIABLE-NAME = value.
    export PATH = 1bin: /usr/bin

→ Extracting values from variables
To extract a value from variables a dollar sign is used

Eg: echo $variable_name
    echo . $name
    echo $PATH

8.2 Looping and Conditional statements

conditional statements

→ the if construct is followed by an expression enclosed in parenthesis

The operators are similar to o operator.

The then keyword is placed about the calling parathesis

An if must end with an endif the.

i) if statement
This block will process if specified condition is true

Syntax: Example
if [expression]   a = 10
then   b = 20
    statement   if ($a == $b
fi   then
                                  echo " a equal to b"
                                  fi

ii) if-else statement
If-specified conditions is not true in if part then else part will be executed.

Syntax: Example
if [expression]   a = 20
then   b = 20
    statement 1   if [$a == $b]
else   then
    statement 2   echo "a equal to b"
fi   else
                                  echo "a is not equal to b"