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D4 Teknik Informatika 2A

Praktikum Perl

Array and Nested If Statement

A. Exercise : Array

Question :

1. Using appropriate array access and join functions construct the following strings and store these in a single variable and print to screen:
   Source Code :

```
my @words = qw( The quick brown fox jumps over the lazy dog and runs away ); # createa new array using qw
print "1. ";
print "@words[0,1,3..6,8]\n";
print "2. ";
print "@words[0,2,3,10,11]\n";
print "3. ";
print "@words[0,7,8,10]\n";
print "4. ";
print "@words[0,8,10,11,1]\n";
print "5. ";
print "@words[0..2,8,10,5..7,3]\n";
```

   Output :

```
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl array.pl
1. The quick fox jumps over the dog
2. The brown fox runs away
3. The lazy dog runs
4. The dog runs away quick
5. The quick brown dog runs over the lazy fox
```

2. Create a 2d array of people :
   Source Code :

```perl
use strict;

my @people = (["Clark", "Kent"], ["Lois", "Lane"], ["Bruce", "Wayne"]);
#a. Use push to add "Superman" to Clark Kent's sub-array.
my $clarkarray = @people[0];
push (@${clarkarray},("Superman"));

#b. Use pop to remove Bruce Wayne from the matrix
pop(@people);

#c. Use a directly indexed scalar add "Reporter" to the third element of Lois Lane's sub-array.
$people[1][2] = "Reporter";
#d. Add a third sub-array with the values "Jimmy", "Olsen", "Photographer".
$people[2][0] = "Jimmy";
$people[2][1] = "Olsen";
$people[2][2] = "Photographer";
#e.Print the resulting matrix to the screen.
print "matrix :\n";
foreach(@people){
    print join("", @{$_},"\n");
}
#f. Print only the last names to the screen.
foreach(@people[-1]){
    print join("", @{$_});
}
```

Output:

```
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl array.pl
matrix :
ClarkKentSuperman
LoisLaneReporter
JimmyOlsenPhotographer
JimmyOlsenPhotographer
```

B. Exercise : Nested And Compound If Statement

1. Modify the program to accept numbers from and re-run the program to see the changes in the program behaviour.

nesterif1.pl

```perl
#!/usr/bin/perl
use strict;
my $x = 5.1;
my $y = 5.1;
print "masukkan X :";
my $x = <STDIN>;
print "masukkan Y :";
my $y = <STDIN>;
if ( $x > 5.0 ){
    if ( $y > 5.0 ){
    print "x and y are greater than 5\n";
    }
     if ($y < 5.0){
    print "x greater than 5, and y lowest than 5\n";
    }
}
if ( $x < 5.0 ){
    if ($y> 5.0){
    print "x lowest than 5 and y greater than 5\n";
    }
    if ($y<5.0){
        print "x and y are lowest than 5\n";
    }
}
```

```
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl nesterif1.pl
masukkan X :3.0
masukkan Y :6.0
x lowest than 5 and y greater than 5
```

2. Using a combination of and, or and if statements or nested statements, write a script to print out the following statements under these salary/bonus scenarios: (a) Salary < 100000, Bonus <

100000: “You are not a banker.” (b) Salary > 100000, Bonus < 100000: “You are banker with no bonus.” (c) Salary > 100000, Bonus > 100000: “You are banker with a big bonus.” (d) Salary < 100000, Bonus > 100000: “You won the lottery.” (e) Salary or Bonus > 100000: “You are buying dinner tonight.

Source Code :

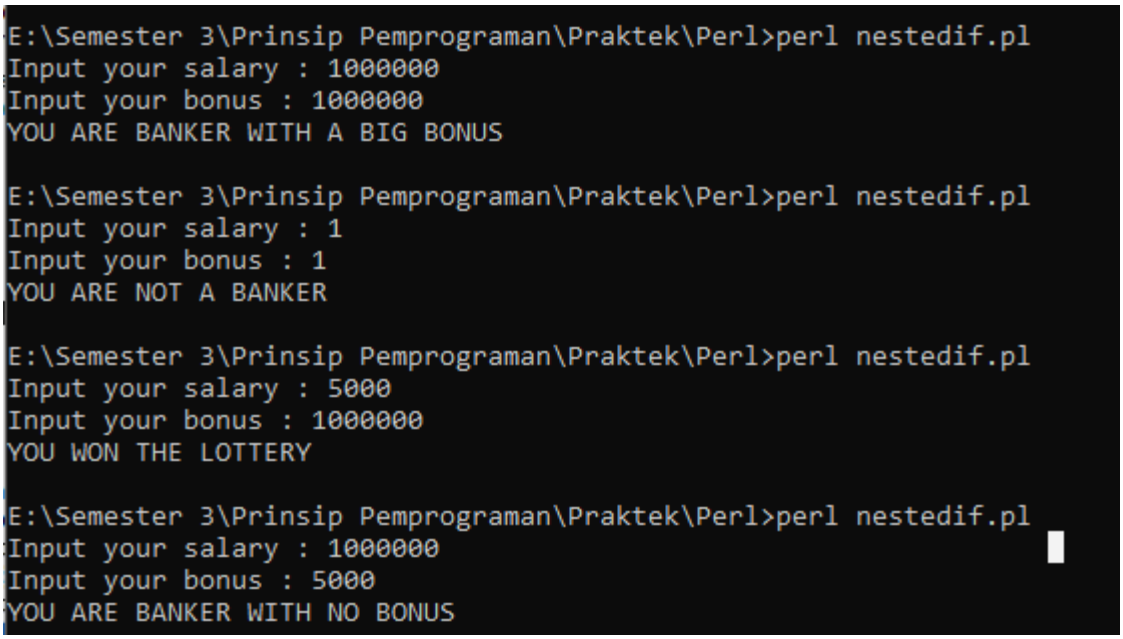
nestedif.pl

```
use strict;

my $x = 100000; #salary
my $y = 100000; #bonus
print "Input your salary : ";
$x = <STDIN>;
print "Input your bonus : ";
$y = <STDIN>;


if ($x<100000){
    if ($y<100000){
        print "YOU ARE NOT A BANKER\n";
    }
    if ($y>100000){
        print "YOU WON THE LOTTERY\n";
    }
}
if ($x>100000){
    if ($y<100000){
        print "YOU ARE BANKER WITH NO BONUS\n";
    }
    if ($y>100000){
        print "YOU ARE BANKER WITH A BIG BONUS\n";
    }
}
```

Output :


E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl nestedif.pl
Input your salary : 1000000
Input your bonus : 1000000
YOU ARE BANKER WITH A BIG BONUS
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl nestedif.pl
Input your salary : 1
Input your bonus : 1
YOU ARE NOT A BANKER
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl nestedif.pl
Input your salary : 5000
Input your bonus : 1000000
YOU WON THE LOTTERY
E:\Semester 3\Prinsip Pemprograman\Praktek\Perl>perl nestedif.pl
Input your salary : 1000000
Input your bonus : 5000
YOU ARE BANKER WITH NO BONUS