**Perl Exam 2, function summaries.**

**Random number generator:**

**$george = int(rand(6) + 1); //Number between 1 and 6.**

**Read from user:**

**$read = <STDIN>; chomp $read;**

**Break out of a while loop:**

**last;**

**Start while loop from 0:**

**next;**

**Check if a string is inside another:**

**$foo = index $x, $y;**

**if ($foo == -1 ) { print “The short string isn't inside the longer one.”}**

**Create an array with elements from 1 to 10.**

**@numbers = (1,2,3,4,5,6,7,8,9,10);**

**Slice odd numbers from the array.**

**@odd = @numbers[0,2,4,6,8];**

**Get size of an array:**

**print $#numbers;**

**#Print @numbers using for loop.**

**for ($x = 0; $x < @numbers ;$x++) {**

**print @numbers[$x];**

**print "\n";**

**}**

**#Print @odd using foreach.**

**foreach $x (@odd) {**

**print $x;**

**print "\n";**

**}**

**Sort a list of names (not numbers!)**

**@names = ('George', 'Sia', 'David' , 'Alia' 'Rihanna');**

**@sorted\_names = sort(@names);**

**Add (or push) value to array (or list).**

**push @random\_numbers, $random\_variable;**

**Sort a list of numbers only!**

**@sorted\_numbers = sort { $a <=> $b} @random\_numbers;**

**Split an array based on “,”:**

**$x = “George , Chalhoub”;**

**@arr\_stuff = split (/, /,$x);**

**print $arr\_stuff[0]; // prints George**

**print $arr\_stuff[1]; // prints Chalhoub**

**Turn an array into a string (delimited)**

**@nums = (1,2,3,4,5,6,7,8,9,10);**

**$scalar = join("-",@nums);**

**print $scalar;**

**Reverse an array**

**$reversed\_input = reverse($input);**

**Create a hash**

**%contact\_list = ( "Courage" => "03 994400",**

**"Kim" => "71 333933",**

**"Obama" => "03 123456",**

**"Bush" => "76 787871",**

**"Howard" => "70 134123");**

**Search based on key**

**print $contact\_list{$key};**

**Print keys**

**print "Here is a list of ZIP codes: ";**

**for (keys %cities) {**

**print "$\_ "**

**}**

**Print hash**

**for (keys %cities) {**

**print "$\_ - $cities{$\_}\n";**

**}**

**How to find intersection and difference of two arrays**

**%temp=();**

**@array1 = (5,4,2,6,10,12,14,1,19,15);**

**@array2 = (10,13,6,5,2,18,3,19,20,4);**

**@intersect = grep ( $temp{$\_},@array2);**

**@difference = grep (! $temp{$\_},@array2);**

**Read file**

**open (E12FILE, $file);**

**Print file**

**while (<E12FILE>) {**

**print $\_;**

**}**

**Close file**

**close E12FILE;**

**Add file to array (line by line):**

**my @lines = <FILE>;**

**Write to file**

**open(FILE,">data.dat");**

**print FILE “asdfasdf”,"\n";**

**Use sub function to (multiply and sum)**

**sub mup { return $\_[0] \* $\_[1] \* $\_[2]; }**

**print "Enter the first number: ";**

**my $num1 = <STDIN>; chomp($num1);**

**print "Enter the second number: ";**

**my $num2 = <STDIN>; chomp($num1);**

**print "Enter the third number: ";**

**my $num3 = <STDIN>; chomp($num1);**

**my $result = mup $num1, $num2, $num3;**

**print "The multiplication is: ", $result ,"\n";**

**Dereference and referenced value**

**print "Enter the number ", $x + 1, ": ";**

**my $y = <STDIN>; chomp($y);**

**my $z=\$y;**

**print "The reference variable to your number is: ", $z, "\n";**

**print "THe dereferenced values of that variabe is: ", $y, "\n";**

**my $q=\$z;**

**print "The memory location it uses: ", $q, "\n";**

**}**