COEN 10 – Midterm I

10/16/15

1. (20 points) Write the PHP code to output each element of array $x that has a value greater than its position. The size of the array is given by $size.

$size=count($x);

for ($i=0;$i<$size;$i++)

{

If($x[$i]>$i)

{

Echo $x[$i];

}

}

1. (20 points) Write the PHP code to calculate the average of the odd numbers in array $x. The size of the array is given by $size.

$size=count($x);

$sum=0;

$counter=0;

For($i=0;$i<$size;$i++)

{

If($x[$i]%2==1)

{

$sum+=$x[$i];

$counter++;

}

If($counter>0)

{

$average=$sum/$counter;

}

Else

{

Echo “no odd numbers”;

}

}

1. (20 points) Write the PHP code to check if all the elements of array $x are odd. Output “yes” if they are(all of them!), or output “no” if at least one is not. The size of the array is given by $size.

$size=count($x);

$f=0;

For($i=0;$i<$size;$i++)

{

If($x[$i]%2==0)

{

Echo “no”;

$f==1;

Break;

}

}

If($f==0)

Echo “yes”;

1. (20 points) Write the PHP code to swap every number in an even position of array $x with its right neighbor. Assume array $x has an even number of elements. The size of the array is given by $size.

$size=count($x);

$temp=0;

For($i=0;$i<$size;$i+=2)

{

$temp==$x[$i];

$x[$i]==$x[$i+1];

$x[$i+1]==$temp;

}

1. (20 points) Write the PHP code to output the minimum odd number in array $x. assume $x[0] is an odd number. The size of the array is given by $size. (extra credit, 10 points) Write a second version that does not assume that $x[0] is an odd number.

$size=count($x);

$min=$x[0];

For($i=0;$i<$size;$i++)

{

If($x[$i]<$min && $x[$i]%2==1)

$min=$x[$i];

}

Extra credit:

$min=0;

$size=count($x);

For($i=0;$i<$size;$i++)

{

If($x[$i]%2==1)

{

$min=$x[$i];

Break;

}

}

If($i==$size)

Echo “no odd numbers”;

Else

{

For($j=$i++;$j<$size;$j++)

{

If($x[$j]<$min && $x[$j]%2==1)

$min=$x[$i];

}

}

