<html xmlns="http://www.w3.org/1999/xhtml">

<head>

<title>Deret Taylor dengan Cos</title>

</head>

<form method="POST" action="index.php">

<table>

<tr>

<td>Masukkan X</td>

<td>:</td>

<td><input type="text" name="cos" id="cos" value="<?php echo $\_REQUEST['cos']; ?>"></td>

</tr>

<tr>

<td>Suku Ke-n</td>

<td>:</td>

<td><input type="text" name="suku" id="suku" value="<?php echo $\_REQUEST['suku']; ?>"></td>

</tr>

<tr>

<td></td>

<td></td>

<td><input type="submit" name="hitung" value="Hitung" ></td>

</tr>

</table>

</form>

<?php

if(!empty( $\_REQUEST['cos'])){

function factorial($bil){

if($bil<=1){

return 1;

}else{

//fungsi rekursif

return $bil\*factorial($bil-1);

}

}

$x= $\_REQUEST['cos'];

$n = $\_REQUEST['suku'];

$x0 = 1;

$hasil = 0;

$y = $x-$x0;

$temp = 0;

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

$pangkat = pow($y, $i);

if($i%4==0){

$hasilcos = number\_format(cos($x0), 4);

}else if($i%4==1){

$hasilcos = number\_format(-sin($x0), 4);

}else if($i%4==2){

$hasilcos = number\_format(-cos($x0), 4);

}else if($i%4==3){

$hasilcos = number\_format(sin($x0), 4);

}

$k = $pangkat/factorial($i);

$temp = $hasilcos \* $k;

echo "(".$hasilcos."\*".$k.")=".$temp."<br>";

$hasil += $temp;

}

echo "<br><br>".$hasil;

}

?></html>

