Assignment 5-2

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Qs: Rewrite the Pascal Quadratic (from unit 2) program in PHP.

Source Code:

```
<?php
   $total = 0;
$flag = true;
do
{
echo("\n");
echo("\nEnter 0 0 0 to quit");
echo("\nEnter a b c values: \n");
$a = (float)readline();
$b = (float)readline();
$c = (float)readline();
echo("The a b c values are: " . $a ." ". $b ." ". $c ."\n");



if($a == 0 && $b == 0 && $c == 0)
{
echo($total . " equations were solved.");
$flag = false;
}
else
{
$total += 1;
$determinant = (($b * $b) - (4) * ($a * $c));
```

```
if($determinant>0)
{
$x = (-$b+sqrt($determinant))/(2.0*$a);
$y = (-$b-sqrt($determinant))/(2.0*$a);
echo("Roots are real... \n");
echo("Root 1:");
echo sprintf("%.16E",$x);
echo("\n");
echo("Root 2:");
echo sprintf("%.16E",$y, "\n");
}
elseif($determinant==0)
{
$r1 = (-$b)/(2.0*$a);
echo("One real root...\n");
echo("Root 1:");
echo sprintf("%.16E",$r1, "\n");
}
else
{
$z1 = (-$b)/(2.0*$a);
$z2 = sqrt(-$determinant)/(2.0*$a);
$z3 = $z1 + $z2;
$z4 = $z1 - $z2;
echo("Roots are imaginary...\n");
echo ("Root 1: i*");
echo sprintf("%.16E",$z3);
```

```
echo("\n");

echo("Root 2: i*");

echo sprintf("%.16E",$z4, "\n");




}

}

}while($flag);

?>
```

Output: