```php
<?php

class RDP {
    protected $inputString;
    protected $pointerInString;
    protected $resultString;
    protected $endOfString;

    function __construct($input, $delimiter='$'){
        $this->inputString=$input;//user input string taken from inputpage
        $this->pointerInString=0;//pointer point to first character
        $this->resultString=true;
        $this->endOfString=$delimiter;
        $this->exp(); //starting point
        if(!$this->endOfInput())
            $this->resultString=false;
    }
    function isresultString(){
        return $this->resultString;
    }
    protected function endOfInput(){
        $isDone=($this->pointerInString>=strlen($this->inputString))||
        (strlen($this->inputString)==0);
        if($this->pointerInString==(strlen($this->inputString)-1))
            if($this->inputString[$this->pointerInString]==$this->endOfString)
                $isDone=true;
                return $isDone;
    }
    protected function match($myToken){
        if(($this->pointerInString<strlen($this->inputString))&&
        ($this->inputString[$this->pointerInString]==$myToken))
        {
            $this->pointerInString +=1;
            return true;
        }else
            return false;
        }
    function exp(){
        if($this->resultString)
            $this->term();
        $done=$this->endOfInput();
        while($this->resultString && !$done)
        {
            if(($this->inputString[$this->pointerInString] == '+') ||
```

```php
                ($this->inputString[$this->pointerInString] == '-'))
                {
                        $this->match($this->inputString[$this->pointerInString]);
                        $this->term();
                }
                elseif(($this->inputString[$this->pointerInString] == ')') ||
                ($this->inputString[$this->pointerInString] == $this->endOfString))
                        $done = true;
                else
                        $this->resultString = false;
        }
}
function term() {
        if($this->resultString)
                $this->factor();
        $done = $this->endOfInput();
        while($this->resultString && !$done)
        {
                if(($this->inputString[$this->pointerInString] == '*') || ($this-
                >inputString[$this->pointerInString] == '/'))
                {
                        $this->match($this->inputString[$this->pointerInString]);
                        $this->factor();
                }
                elseif(($this->inputString[$this->pointerInString] == '+') ||
                ($this->inputString[$this->pointerInString] == '-') ||
                ($this->inputString[$this->pointerInString] == ')') ||
                ($this->inputString[$this->pointerInString] == $this->endOfString))
                        $done = true;
                else
                        $this->resultString = false;
        }
}
function factor() {
        if($this->endOfInput())
                $this->resultString = false;
        if($this->resultString)
        {
                if($this->inputString[$this->pointerInString] == '(')
                {
                        $this->match($this->inputString[$this-
                        >pointerInString]);
                        $this->exp();
```

```php
                            $this->resultString = $this->resultString && $this-
                            >match(')');
                    }
                    else
                            $this->digit();
            }
    }
    function digit() {
            $digitArray = array('0', '1', '2', '3', '4', '5', '6', '7', '8', '9');
            if($this->endOfInput())
                    $this->resultString = false;
            elseif(array_search($this->inputString[$this->pointerInString],
            $digitArray) !== False)
            {
                    $this->resultString = $this->resultString && $this-
                    >match($this->inputString[$this->pointerInString]);
            }
            else
                    $this->resultString = false;
    }
}

?>
```