

```

<?PHP
$FILE_NAME = $argv[1];

$fileStore = file( $FILE_NAME , FILE_IGNORE_NEW_LINES |
FILE_SKIP_EMPTY_LINES);
if($fileStore === FALSE)
{
    die("Invalid file path: " . $FILE_NAME . "\r\n");
}

$storage = "";

function isCG($str)
{
    //cgx or xcg
    return (($str[0] == 'C' && $str[1] == 'G') || ($str[1] == 'C' &&
$str[2] == 'G'));
}

foreach($fileStore as $line)
{
    $cells = explode(",", $line);

    if(strlen($cells[0]) > 3)
    {
        //first column invalid
        $storage .=
"$cells[0],$cells[1],$cells[2],$cells[3],X,X,X\r\n";
    }
    else
    {
        $codon = $cells[3];
        $isCG = $isCreated = $isDestroyed = false;

        $isCG = isCG($codon);

        //get mutation
        $newChar = $cells[0][2];
        //set mutation
        $codon[1] = $newChar;

        //test again for isCreated
        $isCreated = isCG($codon);

        //check if destroyed: only if originally CG and now is not
        $isDestroyed = $isCG && (!$isCreated);

        //Output as Y/N
        $storage .=
"$cells[0],$cells[1],$cells[2],$cells[3],".($isCG ?
"Y":"N").",".($isCreated ? "Y":"N").",".($isDestroyed ? "Y":"N")."\r\n";
    }
}

```

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$output = fopen($FILE_NAME,"w");  
fwrite($output, $storage);  
fclose($output);
```

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echo "Done.";  
?>
```