

PRN NO: 2241032

Practical 1

Title: Write a Program to check and print whether a given number is even or odd.

1. Write a program to compute net amount from the given quantity purchased and rate per quantity. Discount @10% is allowed if the quantity purchased exceeds 100.

Objective :

Illustrating the use of :

- i) modulo operator.
- ii) If statement.

Theory:

Modulo operator

It is an integer operator and it finds out the remainder after an integer division of the two integers. Basically the result shows up the remainder in an integer form.

The modulo operator returns the remainder of the division of two integers. Let us look at an example: `<?Php echo 25 % 2; ?>`

output:

1

*The sign (positive/negative) of the divisor doesn't affect the sign of the result. It is only affected by the sign of the dividend.

But, to get the results in float form we need to add one function i.e,

```
<?php
```

```
echo fmod(8.5, 2);
```

```
?>
```

output: 0.5

Uses of Modulo operator:

1. The topmost necessity of this operator is to check if one integer is divisible with another given integer or not. If the remainder comes up as “0 “ that means both of the numbers are divisible.
2. To evaluate the input is even or odd, by checking at the remainder “0”.
3. Modulo also acts as a limit in some cases, for example, positive numbers will return a number between 0 and N -1, where N is the divisor. It restricts the input number for not exceeding the given limit.
4. In some activities, it can be also used as a loop for a provided limit.

Logic:

Step 1: Take a number. Step

step 2: Divide it by 2.

Step 3: If the remainder is 0, print number is even.

Code:

```
<?php
while (true) {
    $input = readline("Enter a number (type 'exit' to quit): ");
    if ($input === 'exit') {
        echo "Terminating the program.\n";
        exit();
    }

    if (is_numeric($input)) {
        echo ($input % 2 == 0) ? "$input is even.\n" : "$input is odd.\n";
    }
    else
```

```
{      echo "Please enter a valid number or 'exit' to terminate.\n";  
}  
  
}  
?>
```

Output:

```
PS C:\Users\DELL\Desktop\Clg programs\PHP\programs> php "c:\Users\DELL\Desktop\Clg programs\PHP\programs\p1.php"  
Enter a number (type 'exit' to quit): 15  
15 is odd.  
Enter a number (type 'exit' to quit): 12  
12 is even.  
Enter a number (type 'exit' to quit): exit  
Terminating the program.  
PS C:\Users\DELL\Desktop\Clg programs\PHP\programs> |
```

Title: Write a program to compute net amount from the given quantity purchased and rate per quantity. Discount @10% is allowed if the quantity purchased exceeds 100.

Theory:

If statement:

The if statement executes some code if one condition is true. Syntax :

```
if (condition) { code to be executed if  
condition is true;  
}
```

In PHP we have the following conditional statements:

if statement - executes some code if one condition is true if...else statement - executes some code if a condition is true and another code if that condition is false if...elseif...else statement - executes different codes for more than two conditions switch statement - selects one of many blocks of code to be executed

Example:

```
<?php  
$t = date("H");  
if ($t < "10") {  
    echo "Have a good morning!";  
}  
elseif ($t < "20") {  
    echo "Have a good day!";  
}  
else {  
    echo "Have a good night!";  
}  
?>
```

10% is allowed. Or if Quantity <100 then discount = 0.

Algorithm :

Step 1 : Take the inputs form the user

Step 2 : Check if quantity condition satisfies

Step 3 : Do the calculation based on the result of the step 2 Step

4 : display the result

Code:

```
<?php

echo "Enter the Quantity: "; // Added missing semicolon here

$quantity = trim(fgets(STDIN));

echo "Enter the Rate per Quantity: ";

$rate = trim(fgets(STDIN));

$total = $quantity * $rate;

echo "The Total Amount is " . $total;

$discount = 0;

if ($quantity > 100) {

    $discount = 0.10 * $total;

    $total = $total - $discount; // Corrected this line to subtract discount from total

    echo "\nThe Final Amount after Discount is " . $total;

} else {

    echo "\nThe Final Amount is " . $total;

}

?>
```

Output:

```
PS C:\Users\DELL\Desktop\C1g programs\PHP\programs> php "c:\Users\DELL\Desktop\C1g programs\PHP\programs\p1b.php"
Enter the Quantity: 110
Enter the Rate per Quantity: 10
The Total Amount is 1100
The Final Amount after Discount is 990
PS C:\Users\DELL\Desktop\C1g programs\PHP\programs> 
```

Conclusion:

Hence we performed the following programs for checking whether the number is even or odd and the program to compute net amount when the quantity, rate and discount percentage is given using PHP.