**1. Simple Calculator Program in PHP**

Explain

<?php

// Basic Calculator Program in PHP

$number1 = 10;

$number2 = 5;

$operator = '+'; // Change this to '-', '\*', '/', '%' for different operations

switch ($operator) {

case '+':

echo "Addition: " . ($number1 + $number2);

break;

case '-':

echo "Subtraction: " . ($number1 - $number2);

break;

case '\*':

echo "Multiplication: " . ($number1 \* $number2);

break;

case '/':

if ($number2 != 0) {

echo "Division: " . ($number1 / $number2);

} else {

echo "Cannot divide by zero.";

}

break;

case '%':

echo "Modulus: " . ($number1 % $number2);

break;

default:

echo "Invalid operator.";

}

?>

**2. Program to Check if an Alphabet is a Vowel or Not**

**Using if statement**

Explain

<?php

$char = 'a'; // Input alphabet

if ($char == 'a' || $char == 'e' || $char == 'i' || $char == 'o' || $char == 'u') {

echo "$char is a vowel.";

} else {

echo "$char is not a vowel.";

}

?>

**Using if-else-if statement**

Explain

<?php

$char = 'b';

if ($char == 'a') {

echo "$char is a vowel.";

} elseif ($char == 'e') {

echo "$char is a vowel.";

} elseif ($char == 'i') {

echo "$char is a vowel.";

} elseif ($char == 'o') {

echo "$char is a vowel.";

} elseif ($char == 'u') {

echo "$char is a vowel.";

} else {

echo "$char is not a vowel.";

}

?>

**Using switch statement**

Explain

<?php

$char = 'i';

switch ($char) {

case 'a':

case 'e':

case 'i':

case 'o':

case 'u':

echo "$char is a vowel.";

break;

default:

echo "$char is not a vowel.";

}

?>

**3. Check if a Number is Even or Odd Using Conditional Operator**

Explain

<?php

$number = 10;

$result = ($number % 2 == 0) ? "$number is even." : "$number is odd.";

echo $result;

?>

**4. Program to Prepare Marks Sheet of a Student**

Explain

<?php

$math = 80;

$english = 70;

$physics = 90;

$obtained\_marks = $math + $english + $physics;

$total\_marks = 300;

$percentage = ($obtained\_marks / $total\_marks) \* 100;

echo "Obtained Marks: $obtained\_marks<br>";

echo "Percentage: $percentage%<br>";

if ($percentage >= 90) {

echo "Grade: A+";

} elseif ($percentage >= 80) {

echo "Grade: A";

} elseif ($percentage >= 70) {

echo "Grade: B";

} elseif ($percentage >= 60) {

echo "Grade: C";

} else {

echo "Grade: F";

}

?>

**5. Program to Check if a Number is in the Range of 1 to 100**

Explain

<?php

$number = 120; // Input number

if ($number >= 1 && $number <= 100) {

echo "$number is in the range of 1 to 100.";

} else {

echo "$number is above 100.";

}

?>

**6. Correct the Following Program**

Explain

<?php

$x = 5;

$y = 9;

if ($x >= $y) {

echo "x is greater than or equal to y";

} else {

echo "y is greater than x";

}

?>

**7. Switch Statement for Days of the Week**

Explain

<?php

$day = 3; // Input day number

switch ($day) {

case 1:

echo "Monday";

break;

case 2:

echo "Tuesday";

break;

case 3:

echo "Wednesday";

break;

case 4:

echo "Thursday";

break;

case 5:

echo "Friday";

break;

case 6:

echo "Saturday";

break;

case 7:

echo "Sunday";

break;

default:

echo "Invalid day number.";

}

?>