**1. Program to Calculate Total Number of Days Lived**

Explain

<?php

// Input age

$age = 25; // Example: Enter your age here

$number\_of\_days = $age \* 365;

// Output

echo "You have lived for $number\_of\_days days.";

?>

This program multiplies the age in years by 365 to calculate the total number of days lived.

**2. Program to Calculate Percentage of a Student**

Explain

<?php

// Input marks for four subjects

$subject1 = 85; // Example marks for subject 1

$subject2 = 90; // Example marks for subject 2

$subject3 = 88; // Example marks for subject 3

$subject4 = 92; // Example marks for subject 4

// Calculations

$obtained\_marks = $subject1 + $subject2 + $subject3 + $subject4;

$total\_marks = 400;

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

// Output

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

echo "Percentage: $percentage%";

?>

This program calculates the student's percentage based on the marks in 4 subjects.

**3. Program to Convert Temperature from Centigrade to Fahrenheit**

Explain

<?php

// Input temperature in Centigrade

$centigrade = 25; // Example temperature

$fahrenheit = ($centigrade \* 9/5) + 32;

// Output

echo "$centigrade°C is equal to $fahrenheit°F";

?>

This program converts temperature from Centigrade to Fahrenheit using the formula F = (C \* 9/5) + 32.

**4. Logical Operations on Given Values**

Given: $A = 34 and $B = 55.

Explain

<?php

$A = 34;

$B = 55;

// Logical expressions

echo "a) " . ($A == 34 && $B == 55 ? 'true' : 'false') . "<br>";

echo "b) " . ($A >= 30 || $B <= 50 ? 'true' : 'false') . "<br>";

echo "c) " . ($B == 55 || $A == 35 ? 'true' : 'false') . "<br>";

echo "d) " . ($A != 34 ? 'true' : 'false') . "<br>";

echo "e) " . ($A >= 30 && $A < 35 ? 'true' : 'false') . "<br>";

echo "f) " . ($B > 50 || $B < 56 ? 'true' : 'false') . "<br>";

?>

**Explanation of Results:**

* a) true because both conditions ($A == 34 and $B == 55) are true.
* b) true because $A >= 30 is true (even though $B <= 50 is false).
* c) true because $B == 55 is true (even though $A == 35 is false).
* d) false because $A != 34 is false (since $A is equal to 34).
* e) true because both conditions ($A >= 30 and $A < 35) are true.
* f) true because $B > 50 is true.

**5. Output of the Following Code**

Explain

<?php

$a = 33;

$b = 55;

$a += $b; // $a becomes 88

$c = $a; // $c is now 88

$c -= $b; // $c becomes 33

$c \*= $a; // $c becomes 2904

$a++; // $a becomes 89

echo "a=$a, b=$b, c=$c";

?>

**Output**:

a=89, b=55, c=2904

**6. Output of the Program Segment**

Explain

<?php

$a = 8;

$b = ++$a + 5; // Pre-increment: $a becomes 9, then $b = 9 + 5 = 14

$c = $b-- + 10; // Post-decrement: $c = 14 + 10 = 24, then $b becomes 13

echo "a=$a, b=$b, c=$c";

?>

**Output**:

a=9, b=13, c=24

**7. Output of the Arithmetic Expressions**

a) echo 4 + 2 - 12 \* 3;

**Output**: -30

**Explanation**: Multiplication is done first, so: 12 \* 3 = 36, then 4 + 2 = 6, and 6 - 36 = -30.

b) echo 4 + (2 - 12) \* 3;

**Output**: -26

**Explanation**: The operation inside parentheses is done first: 2 - 12 = -10, then -10 \* 3 = -30, and 4 + (-30) = -26.

c) echo ( (4 + 2) - 12 ) \* 3;

**Output**: -18

**Explanation**: The operation inside parentheses is done first: (4 + 2) = 6, then 6 - 12 = -6, and -6 \* 3 = -18.

**8. Value Assigned to $ReturnValue**

a) $ReturnValue = 2 == 3;

**Value**: false

**Explanation**: 2 is not equal to 3.

b) $ReturnValue = "2" + "3";

**Value**: 5

**Explanation**: Strings are automatically converted to numbers, so "2" + "3" becomes 2 + 3 = 5.

c) $ReturnValue = 2 > 3;

**Value**: false

**Explanation**: 2 is not greater than 3.

d) $ReturnValue = 2 < 3;

**Value**: true

**Explanation**: 2 is less than 3.

e) $ReturnValue = (2 > 3) && (2 < 3);

**Value**: false

**Explanation**: The first condition 2 > 3 is false, and with the && operator, both conditions must be true.

f) $ReturnValue = (2 > 3) || (2 < 3);

**Value**: true

**Explanation**: The second condition 2 < 3 is true, and with the || operator, only one condition needs to be true for the whole expression to be true.