<?php

// Indexed Array

echo "Indexed Array:<br>";

$subjects = array("Mathematics", "Science", "History");

echo "First subject: " . $subjects[0] . "<br>";

echo "Second subject: " . $subjects[1] . "<br>";

echo "Third subject: " . $subjects[2] . "<br>";

echo "<br>";

// Associative Array

echo "Associative Array:<br>";

$student = array(

"name" => "Alice",

"age" => 20,

"major" => "Computer Science"

);

echo "Name: " . $student["name"] . "<br>";

echo "Age: " . $student["age"] . "<br>";

echo "Major: " . $student["major"] . "<br>";

echo "<br>";

// Multidimensional Array

echo "Multidimensional Array:<br>";

$grades = array(

array("Math" => 90, "Science" => 85, "History" => 88),

array("Math" => 80, "Science" => 89, "History" => 92),

array("Math" => 85, "Science" => 82, "History" => 90)

);

echo "Grade in Math for student 1: " . $grades[0]["Math"] . "<br>";

echo "Grade in History for student 3: " . $grades[2]["History"] . "<br>";

echo "<br>";

function add($num1, $num2) {

while ($num2 != 0) {

$carry = $num1 & $num2;

$num1 = $num1 ^ $num2;

$num2 = $carry << 1;

}

return $num1;

}

$num1 = 15;

$num2 = 30;

$sum = add($num1, $num2);

echo "Sum of $num1 and $num2: $sum";

?>