

**PRN :- 2241032**

## **Practical 4**

**Title:** Write a Menu-Driven program to implement a calculator which performs only addition ,subtraction, multiplication and division. The operation should happen based on the user choice. (use switch case)

**Objective :** Illustrate the use of switch statements.

**Theory :**

### **Switch statement**

(PHP 4, PHP 5, PHP 7, PHP 8)

The switch statement is similar to a series of IF statements on the same expression. In many occasions, you may want to compare the same variable (or expression) with many different values, and execute a different piece of code depending on which value it equals to. This is exactly what the switch statement is for.

#### **Example #1 switch structure**

```
<?php
if ($i == 0)
{
    echo "i equals 0";
}
elseif ($i == 1) {
    echo "i equals 1";
}
elseif ($i == 2) {
    echo "i equals 2";
}

switch ($i)

{ case 0:
```

```

        echo "i equals 0";
        break;

case 1:

    echo "i equals 1";

    break;

case 2:

    echo "i equals 2"; break;

}
?>

```

### Code:

```

<?php
$choice;
$continue = 'y';

while ($continue == 'y') {
    echo "----- MENU ----- \n";
    echo "1. ADDITION \n";
    echo "2. SUBTRACT \n";
    echo "3. MULTIPLY \n";
    echo "4. DIVISION \n";

    $choice = (int)readline("Enter your choice: ");

    switch ($choice) {
        case 1:
            $num1 = (int)readline("Enter the first number: ");
            $num2 = (int)readline("Enter the second number: ");
            echo "\nThe Addition is: " . ($num1 + $num2) . " \n \n";
            break;

        case 2:
            $num1 = (int)readline("Enter the first number: ");
            $num2 = (int)readline("Enter the second number: ");
            echo "\nThe Subtraction is: " . ($num1 - $num2) . " \n \n";
            break;

        case 3:
            $num1 = (int)readline("Enter the first number: ");
            $num2 = (int)readline("Enter the second number: ");
            echo "\nThe Multiplication is: " . ($num1 * $num2) . " \n \n";
            break;

        case 4:
            $num1 = (int)readline("Enter the first number: ");
            $num2 = (int)readline("Enter the second number: ");

```

```

        if ($num2 == 0) {
            echo "\nDivision Error !!!\n\n";
        } else {
            echo "\nThe Division is: " . ($num1 / $num2) . "\n\n";
        }
        break;

default:
    echo "\nInvalid choice! Please try again.\n\n";
}

$continue = (string)readline("Do you want to continue? (y/n): ");
echo "\n";
}
?>

```

### Output:

```

PS C:\Users\DELL\Desktop\C1g programs\PHP\programs> php "c:\Users\DELL\Desktop\C1g programs\PHP\programs\p4.php"
----- MENU -----
1. ADDITION
2. SUBTRACT
3. MULTIPLY
4. DIVISION
Enter your choice: 1
Enter the first number: 32
Enter the second number: 51

The Addition is: 83

Do you want to continue? (y/n): y

----- MENU -----
1. ADDITION
2. SUBTRACT
3. MULTIPLY
4. DIVISION
Enter your choice: 2
Enter the first number: 45
Enter the second number: 32

The Subtraction is: 13

Do you want to continue? (y/n): y

```

```
Do you want to continue? (y/n): y
```

```
----- MENU -----
```

```
1. ADDITION
```

```
2. SUBTRACT
```

```
3. MULTIPLY
```

```
4. DIVISION
```

```
Enter your choice: 3
```

```
Enter the first number: 4
```

```
Enter the second number: 6
```

```
The Multiplication is: 24
```

```
Do you want to continue? (y/n): y
```

```
----- MENU -----
```

```
1. ADDITION
```

```
2. SUBTRACT
```

```
3. MULTIPLY
```

```
4. DIVISION
```

```
Enter your choice: 4
```

```
Enter the first number: 10
```

```
Enter the second number: 5
```

```
The Division is: 2
```

```
Do you want to continue? (y/n): n
```

### Conclusion:

Thus, we performed a Menu-Driven program to implement a calculator which performs only addition, subtraction, multiplication and division and the operation performed is based on the users choice using switch case.



