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### Percentage

```
Decimal denominator = 300; // Denominator value
```

Decimal maths = 70;

Decimal physics =54;

Decimal chemistry = 88;

Decimal numerator = maths+physics+chemistry;

Decimal percentage = (numerator / denominator) \* 100;

```
// Output the percentage value
```

```
System.debug('Percentage: ' + percentage);
```

[illegible]

## Apex class

```
public class PercentageCalculatorController {

    public Decimal subject1 { get; set; }

    public Decimal subject2 { get; set; }

    public Decimal subject3 { get; set; }

    public Decimal percentage { get; set; }

    public Boolean showResult { get; set; }

    public void calculatePercentage() {

        showResult = true;

        Decimal totalMarks = subject1 + subject2 + subject3;

        percentage = (totalMarks / 300) * 100;

    }

}
```

## Visualforce

```
<apex:page controller="PercentageCalculatorController">
    <apex:form>
        <apex:pageBlock title="Percentage Calculator">
            <apex:pageBlockSection>
```

```

        <apex:inputText value="{!subject1}" label="Subject 1"/>
        <apex:inputText value="{!subject2}" label="Subject 2"/>
        <apex:inputText value="{!subject3}" label="Subject 3"/>
        <apex:commandButton value="Calculate" action="{!calculatePercentage}"
rerender="resultPanel"/>
    </apex:pageBlockSection>
</apex:pageBlock>

<apex:outputPanel id="resultPanel">
    <apex:outputText value="Percentage: {!percentage}" rendered="{!showResult}"/>
</apex:outputPanel>
</apex:form>
</apex:page>

```

---

## Calculator

Decimal num1 = 10;

Decimal num2 = 5;

Decimal sum = num1+num2;

System.debug('Sum: ' + sum);

Decimal difference = num1-num2;

System.debug('Difference: ' + difference);

Decimal multiplication = num1\*num2;

System.debug('Product: ' + multiplication);

Decimal division = num1/num2;

System.debug('Quotient: ' + division);

Execution Log		
Timestamp	Event	Details
18:46:24:003	USER_DEBUG	[7] DEBUG Sum: 15
18:46:24:003	USER_DEBUG	[10] DEBUG Difference: 5
18:46:24:003	USER_DEBUG	[13] DEBUG Product: 50
18:46:24:003	USER_DEBUG	[16] DEBUG Quotient: 2

## Apex class

```

public class CalculatorController {

    public Decimal operand1 { get; set; }

    public Decimal operand2 { get; set; }

    public String operator { get; set; }

    public Decimal result { get; set; }

    public Boolean showResult { get; set; }

    public List<SelectOption> getOperators() {

        List<SelectOption> options = new List<SelectOption>();

        options.add(new SelectOption('+', 'Add'));

        options.add(new SelectOption('-', 'Subtract'));

        options.add(new SelectOption('*', 'Multiply'));

        options.add(new SelectOption('/', 'Divide'));

        return options;

    }

    public void calculate() {

        showResult = true;

        if (operator == '+') {

            result = operand1 + operand2;

        } else if (operator == '-') {

            result = operand1 - operand2;

        } else if (operator == '*') {

            result = operand1 * operand2;

        } else if (operator == '/') {

            if (operand2 != 0) {

                result = operand1 / operand2;

            } else {

                ApexPages.addMessage(new ApexPages.Message(ApexPages.Severity.ERROR, 'Division by
zero is not allowed.));

                showResult = false;

            }

        }

    }

}

```

```

    }
}
}
}

```

### Visualforce page

```

<apex:page controller="CalculatorController">
    <apex:form>
        <apex:pageBlock title="Calculator">
            <apex:pageBlockSection>
                <apex:inputText value="{!operand1}" label="Operand 1"/>
                <apex:inputText value="{!operand2}" label="Operand 2"/>
                <apex:selectList value="{!operator}" size="1">
                    <apex:selectOptions value="{!operators}"/>
                </apex:selectList>
                <apex:commandButton value="Calculate" action="{!calculate}" rerender="resultPanel"/>
            </apex:pageBlockSection>
        </apex:pageBlock>

        <apex:outputPanel id="resultPanel">
            <apex:outputText value="Result: {!result}" rendered="{!showResult}"/>
        </apex:outputPanel>
    </apex:form>
</apex:page>

```

### Celsius to Fahrenheit

Decimal c = 27; // Celsius temperature to convert

System.debug('Fahrenheit: ' + ( c \* 9/5) + 32);

19:10:56:003	USER_DEBUG	[2]   DEBUG   Fahrenheit: 48.632
--------------	------------	----------------------------------

### Apex class

```

public class TemperatureConverterController {

```

```

public Decimal celsius { get; set; }

public Decimal fahrenheit { get; set; }

public Boolean showResult { get; set; }

public void convertTemperature() {
    showResult = true;
    fahrenheit = (celsius * 9 / 5) + 32;
}
}

```

### Visual page

```

<apex:page controller="TemperatureConverterController">

    <apex:form>

        <apex:pageBlock title="Temperature Converter">

            <apex:pageBlockSection>

                <apex:inputText value="{!celsius}" label="Celsius"/>

                <apex:commandButton value="Convert" action="{!convertTemperature}"
rerender="resultPanel"/>

            </apex:pageBlockSection>

        </apex:pageBlock>

        <apex:outputPanel id="resultPanel">

            <apex:outputText value="Fahrenheit: {!fahrenheit}" rendered="{!showResult}"/>

        </apex:outputPanel>

    </apex:form>

</apex:page>

```

Temperature Converter

Celsius

Convert

Fahrenheit: 89.6

### Multiple choice

#### Visualforce page :

```

<apex:page controller="MultipleChoiceQuestionController">

```

```

<apex:form>

    <apex:pageBlock title="Multiple Choice Question">

        <apex:pageBlockSection>

            <apex:outputText value="Question: {!currentQuestion.questionText}" />


            <apex:selectRadio value="{!selectedAnswer}">

                <apex:selectOptions value="{!answerOptions}" />

            </apex:selectRadio>


            <apex:commandButton value="Submit" action="{!submitAnswer}" />

        </apex:pageBlockSection>

    </apex:pageBlock>

</apex:form>

</apex:page>

```

#### **Apex class :**

```

public class MultipleChoiceQuestionController {

    public Question currentQuestion { get; set; }

    public String selectedAnswer { get; set; }


    public MultipleChoiceQuestionController() {

        currentQuestion = new Question();

        currentQuestion.questionText = 'What is the capital of France?';

        currentQuestion.answerOptions = new List<SelectOption>();

        currentQuestion.answerOptions.add(new SelectOption('A', 'Paris'));

        currentQuestion.answerOptions.add(new SelectOption('B', 'London'));

        currentQuestion.answerOptions.add(new SelectOption('C', 'Berlin'));

        currentQuestion.answerOptions.add(new SelectOption('D', 'Madrid'));

    }


    public List<SelectOption> getAnswerOptions() {

        return currentQuestion.answerOptions;

    }

}

```

```
}
```

```
public PageReference submitAnswer() {
```

```
    // Process the selected answer
```

```
    // You can add your logic here to validate the selected answer or perform any other actions based on it.
```

```
    // Redirect to another page or perform any necessary operations after submitting the answer.
```

```
    // You can define the logic to determine the next question or action based on your requirements.
```

```
    return null; // Return the PageReference for the next page or null if no redirection is needed.
```

```
}
```

```
public class Question {
```

```
    public String questionText { get; set; }
```

```
    public List<SelectOption> answerOptions { get; set; }
```

```
}
```

```
}
```

#### Multiple Choice Question

Question: What is the capital of France?

☐ Paris ☐ London ☒ Berlin ☐ Madrid

Submit