<u>Shravani</u>

<u>Percentage</u>

```
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);
```

Timestamp	Event	Details
18:36:33:003	USER_DEBUG	[10] DEBUG Percentage: 70.666666666666666666666666666700

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>
```

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}"</pre>
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 32
ahrenheit: 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?
                                                                    Submit
```