

```
// Declaring variables
var classGrade;
var desiredGrade;
var examWeight;
var classWeight;
var examGrade;
```

```
// Checks if values are missing
function valuesInputted() {
  if(classGrade.length == 0 || desiredGrade.length == 0 || examWeight.length == 0){
    return false;
  }
  else{
    return true;
  }
}
```

```
// Checks if values are valid
function valuesValid() {
  if((classGrade >= 0) && (desiredGrade <= 100 && desiredGrade >= 0) && (examWeight >= 0
&& examWeight <= 100)){
    return true;
  }
  else{
    return false;
  }
}
```

```
// If all conditions are met, calculates value and displays it
// Also notifies user if values are missing or invalid
function crunchNumbers() {
  if(valuesInputted()){
    if(valuesValid()){
      classWeight = 1 - (examWeight/100);
      examGrade = ((desiredGrade - (classGrade * classWeight)) / examWeight) * 100;
      setText("resultLabel", "You need a " + String(examGrade.toFixed(2)) + "% on your final
      exam to acheive your desired grade");
    }
    else{
      setText("resultLabel","Please enter valid values in the boxes");
    }
  }
  else{
    setText("resultLabel","Please enter values in all the boxes");
  }
}
```

```
// Updates all input variables and calls "crunchNumbers" function when "goButton" is clicked
onEvent("goButton", "click", function( ) {
  classGrade = getText("classGradeInput");
  desiredGrade = getText("desiredGradeInput");
  examWeight = getText("examWeightInput");
  crunchNumbers();
});
```