**Explanation**

**Task 1:**

**//Integer variable was defined for marks**

**//User asked to input marks**

**//Inputted marks assigned to marks variable**

**//if statements and (AND) logic gate is used to output grade based on marks**

**Task 2**

**//Variable is defined for a number(integer)**

**//User is asked to input a number**

**//inputted number is assigned to variable**

**//if statements and (AND) operator is used to check if number is a multiple of 2 and 5**

**//if condition is true then output is :”Number is even and divisible by 5**

**//else output is:” number is not both even and divisible by 5”**

**Task 3**

**//Variable is defined for year**

**//User is asked to input year**

**//Assign inputted value to year**

**//If statement is used to check if year is divisible by 4 and not divisible by 100**

**//if condition is satisfied then year is a leap year**

**//otherwise elseif statement is used to check whether year is divisible by 4 and 100**

**//if condition is satisfied then another if statement is used to check if it is divisible by 400**

**//if condition is satisfied then year is leap year else its not a leap year**

**Task 4**

**//float variables are defined for attendence and gpa**

**//user is asked to input values for attendence and gpa**

**//inputted values are assigned to att ang gpa variables**

**//if and (AND) logic gate is used to check if att>80 and gpa>3,5**

**//if true then output is “eligible for scholarship” else “not eligible”**

**Task 5**

**//a character variable is defined**

**//user is asked to input a letter**

**//letter is assigned to variable**

**//if statement is used to check whether letter is a,e,i,o,u using or gate.**

**//if condition is true then output is “letter is a vowel” otherwise “ letter is a consonant”**