

1. Three numbers are input through keyboard. Write a program to find out the **maximum** and **minimum** of these 3 numbers.
2. Take a year as input and determine whether it is a **leap year**.
[Hint: Check the divisibility by 4, 100 and 400]
3. If cost price and selling price of an item is input through the keyboard, write a program to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss he incurred.
4. Any integer is input through keyboard. Write a program to find out whether it is an **odd number** or **even number**.
5. According to Gregorian calendar, it was Monday on the date 01/01/1900. If any year is input through the keyboard write a program to find out what is the day on 1st January of this year.
6. A five digit number is entered through the keyboard. Write a program to obtain the reverse number and to determine whether the original numbers are equal or not.
7. AUST grading policy is :
 - (i) 80 % marks or above is A+
 - (ii) 75% to 79% marks is A
 - (iii) 70% to 74% marks is A-
 - (iv) 65% to 69% marks is B+
 - (v) 60% to 64% marks is B
 - (vi) 55% to 59% marks is B-
 - (vii) 50% to 54% marks is C+
 - (viii) 45% to 49% marks is C
 - (ix) 40% to 44% marks is D
 - (x) Below 40% is F

Write a program which will take an input from user and calculate the grade of a student according to AUST grading policy based on that input.

8. A certain grade of steel is graded according to the following conditions:
 - (i) Hardness must be greater than 60
 - (ii) Carbon content must be less than 0.7
 - (iii) Tensile strength must be greater than 5000

The grades are as follows:

Grade is 10 if all three conditions are met

Grade is 9 if condition (i) and (ii) are met

Grade is 8 if condition (ii) and (iii) are met

Grade is 7 if condition (i) and (iii) are met

Grade is 6 if only one condition is met

Grade is 5 if none of the conditions are met

Write a program which will require the user to give values of hardness, carbon content and tensile strength of the steel under consideration and output the grade of the steel.