Practice Questions

Q1.Rajat doesn’t know that he is eligible to vote in the upcoming Lok Sabha elections or not. WAP to help Rajat in automating this task by writing a program for it.

Q2. Akshit has appeared for End Term exam for “C Programming” subject. He wants to know his grade in the subject as per marks obtained by him. The grade depends upon marks obtained as per below mentioned criteria:

|  |  |
| --- | --- |
| Marks | Grade |
| >= 75 | Distinction |
| >= 60 and <75 | First division |
| >=50 and <60 | Second division |
| >=40 and <50 | Third division |
| <40 | Fail |

Q3.Deepak wants to convert a character entered in lower case to uppercase and if it is entered in upper case then he would like to convert it to lowercase. Help Deepak to understand this task by drawing a flowchart and also write a program for the same.

Q4. Harish HR Director of a software company wants to distribute bonus among employees on the occasion of Christmas. The bonus is given as per the following instructions:

|  |  |
| --- | --- |
| Salary | Bonus |
| <=25000 | 20% |
| >25000 and <=50000 | 15% |
| >50000 and <=100000 | 10% |
| >100000 | 5% |

Draw a flow chart and write a program to help Haris to calculate the bonus and total amount to be given to a particular employee (salary +bonus).

Q5. The Air Quality Index (AQI) shows the levels of health concerns for a particular area. The level of air quality for a given AQI is mentioned as below:

|  |  |
| --- | --- |
| AQI (Air Quality Index) | Level of Air Quality |
| >0 and <=50 | Healthy |
| >50 and <=100 | Moderate |
| >100 and <=200 | Unhealthy |
| >200 and <=300 | Very Unhealthy |
| >300 and <=500 | Hazardous |

Shyam resides in South Delhi. Draw a flow chart and write a program to help Shyam to find out what is the level of air quality in his area depending upon the AQI of the area.

**Q6.** Amit wants to find the roots of quadratic equation ax2+bx+c=0. Draw a flow chart and write a program to help him to find out that the roots of quadratic equation.