Questions

1. Write a program to find the greatest among three numbers input by the user
2. Write a program to find if the year entered is leap or not
3. By using switch statement write a program to display Monday to Sunday after an input from a user
4. Write a program to accept a score. If this score is not equal to 75 then display “Fail”, otherwise display “Pass”.
5. Write a program to accept a number. Use the case statement to display “Tanzania” when number is 1, “Kenya” when number is 2, and “Uganda”, when number is 3. Display “That is not correct” if number wasn’t any of the above.
6. Write a program which prompt user to enter an integer number so as to print “Hello, I love C programming” only when the number is less than 10 and display the message “This is greater than 10” when it is otherwise {Use if-else statement}.
7. Use switch statement to write a C program that prompts a user to select a month from January to December and display the selected month.
8. Write a C program which allows the user to enter the score for the student and it displays the recommendations and grade for the score. Example: When a user enters 80, the programs should displays: Passed and grade is A.
9. Any integer is input through the keyboard. Write a program to find out whether it is an odd number or even number.
10. Write a c program to find largest among three numbers using conditional operator.
11. By using switch statement write a program to display Monday to Sunday after an input from a user
12. Write a program that will prompt a user to enter two integers and then by using switch statement a user can enter a number to see the result of the five arithmetic operations on those integers.
13. Write a program that requests an integer value from the user. If the value is between 1 and 100 inclusive, print “OK;”otherwise, print “Out of range”.
14. If cost price and selling price of an item is input through the keyboard, write a program todetermine whether the seller has made profit or incurred loss. Also determine how muchprofit he made or loss he incurred.
15. A five-digit number is entered through the keyboard. Write a program to obtain the  
    reversed number and to determine whether the original and reversed numbers are equal ornot.
16. If the ages of Ram, Shyam and Ajay are input through the keyboard, write a program todetermine the youngest of the three.
17. Given the length and breadth of a rectangle, write a program to find whether the area of therectangle is greater than its perimeter. For example, the area of the rectangle with length =5 and breadth = 4 is greater than its perimeter.
18. A certain grade of steel is graded according to the following conditions:  
    (i) Hardness must be greater than 50, (ii) Carbon content must be less than 0.7 (iii) Tensile strength must be greater than 5600.  
    The grades are as follows:  
    Grade is 10 if all three conditions are met, Grade is 9 if conditions (i) and (ii) are met, Grade is 8 if conditions (ii) and (iii) are met, Grade is 7 if conditions (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.
19. A library charges a fine for every book returned late. For first 5 days the fine is 1TShs, for 6-10 days fine is 2TShs and above 10 days fine is 10TShs. If you return the book after 30 daysyour membership will be cancelled. Write a program to accept the number of days themember is late to return the book and display the fine or the appropriate message.
20. If the three sides of a triangle are entered through the keyboard, write a program to checkwhether the triangle is valid or not. The triangle is valid if the sum of two sides is greaterthan the largest of the three sides. If the three sides of a triangle are entered through thekeyboard, write a program to check whether the triangle is isosceles, equilateral, scalene orright angled triangle.
21. In a company, worker efficiency is determined on the basis of the time required for aworker to complete a particular job. If the time taken by the worker is between 2 – 3 hours,then the worker is said to be highly efficient. If the time required by the worker is between3 – 4 hours, then the worker is ordered to improve speed. If the time taken is between 4 – 5hours, the worker is given training to improve his speed, and if the time taken by theworker is more than 5 hours, then the worker has to leave the company. If the time taken bythe worker is input through the keyboard, find the efficiency of the worker.
22. A university has the following rules for a student to qualify for a degree with A as the mainsubject and B as the subsidiary subject:  
    (a) He should get 55 percent or more in A and 45 percent or more in B.  
    (b) If he gets less than 55 percent in A he should get 55 percent or more in B. However, heshould get at least 45 percent in A.  
    (c) If he gets less than 45 percent in B and 65 percent or more in A he is allowed to reappearin an examination in B to qualify.  
    (d) In all other cases he is declared to have failed.  
    Write a program to receive marks in A and B and Output whether the student has passed,failed or is allowed to reappear in B.
23. The policy followed by a company to process customer orders is given by the followingrules:  
    (a) If a customer order is less than or equal to that in stock and has credit is OK, supply has requirement.  
    (b) If has credit is not OK do not supply. Send him intimation.  
    (c) If has credit is Ok but the item in stock is less than has order, supply what is in stock.Intimate to him data the balance will be shipped.
24. Write a C program that accepts three integers from the keyboard. It prints out number 1 if any two of them (or all of them) are equal and prints out zero if all of them are different.
25. Write a C program which does the following: (a) Accepts three integers from the keyboard. (b) Prints out number 1 if any two of them (or all of them) are the same and prints out zero if all of them are different.
26. Write a C program that reads an integer (from keyboard) and checks whether it is a multiple of 4 or not.
27. Write a C program that accepts 4 integers p, q, r, s from the user where r and s are positive and p is even. If q is greater than r and s is greater than p and if the sum of r and s is greater than the sum of p and q print "Correct values", otherwise print "Wrong values".
28. Write a C program to check whether a given integer is positive even, negative even, positive odd or negative odd. Print even if the number is 0.
29. Write a program that reads two numbers and divide the first number by second number. If the division not possible print "Division not possible".
30. Write a C program to remove any negative sign in front of a number.
31. Write a C programming that reads in two integers and check whether the first integer is a multiple of the second integer.
32. Write a C program to accept two integers and check whether they are equal or not.
33. Write a C program to check whether a given number is positive or negative.
34. Write a C program to read the age of a person and determine whether he or she is eligible to vote (age of voting is 18 years).
35. Write a C program to read the value of an integer m and display the value of n is 1 when m is larger than 0, 0 when m is 0 and -1 when m is less than 0.
36. Write a C program to find the eligibility of admission for a professional course based on the following criteria:   
    Marks in Maths >=65, Marks in Phy >=55, Marks in Chem>=50, Total in all three subject >=180.  
    or Total in Math and Subjects >=140
37. Write a C program to read temperature in centigrade and display a suitable message according to temperature state as follows: Temp < 0 then Freezing weather, Temp 0-10 then Very Cold weather, Temp 10-20 then Cold weather, Temp 20-30 then Normal in Temp, Temp 30-40 then Its Hot, Temp >=40 then Its Very Hot
38. Write a program in C to calculate and print the Electricity bill of a given customer. The customer id., name and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer. The charge are as follow :

|  |  |
| --- | --- |
| **Unit** | **Charge/unit** |
| Up to 199 | @1.20 |
| 200 and above but less than 400 | @1.50 |
| 400 and above but less than 600 | @1.80 |
| 600 and above | @2.00 |

If bill exceeds TShs. 400 then a surcharge of 15% will be charged and the minimum bill should be of TShs 100/-

1. Write a program in C to read any digit, display the digit in the word (if a user enters 4, it should display four).