**C Programming Questions Using if**

1. **Check Positive Number** Write a C program that takes an integer input from the user and checks if the number is positive. If it is positive, print "The number is positive."
2. **Check Even or Odd** Write a C program to check if a given integer is even. If it is even, print "The number is even."
3. **Check Age Eligibility** Write a C program that asks the user for their age and checks if the user is eligible to vote (age 18 or older). If eligible, print "You are eligible to vote."
4. **Check Temperature** Write a C program that takes a temperature value as input and checks if it is above 30 degrees Celsius. If it is, print "It's a hot day."
5. **Check Pass or Fail** Write a C program that takes a student's score as input and checks if the score is 50 or higher. If the score is 50 or higher, print "You passed the exam."

**C Programming Questions Using if and else**

1. **Check Positive or Negative Number** Write a C program that takes an integer input from the user and checks if the number is positive or negative. Print "The number is positive" if it's positive, otherwise print "The number is negative."
2. **Check Even or Odd** Write a C program to check if a given integer is even or odd. Print "The number is even" if it's even, otherwise print "The number is odd."
3. **Check Age Eligibility** Write a C program that asks the user for their age and checks if they are eligible to vote (age 18 or older). Print "You are eligible to vote" if they are 18 or older, otherwise print "You are not eligible to vote."
4. **Compare Two Numbers** Write a C program that takes two integers as input and prints "The first number is greater" if the first number is greater than the second. Otherwise, print "The second number is greater."
5. **Check Pass or Fail** Write a C program that takes a student's score as input and checks if the score is 50 or higher. If the score is 50 or higher, print "You passed the exam," otherwise print "You failed the exam."

**C Programming Questions Using if, else if, and else**

1. **Number Classification** Write a C program that takes an integer input from the user and classifies it as positive, negative, or zero. Use if, else if, and else to print:
   * "The number is positive" if it's greater than 0,
   * "The number is negative" if it's less than 0,
   * "The number is zero" if it's equal to 0.
2. **Grade Classification** Write a C program that takes a student's score as input and prints the grade based on the following conditions:
   * if the score is 90 or above, print "Grade A",
   * else if the score is 80 or above, print "Grade B",
   * else if the score is 70 or above, print "Grade C",
   * else if the score is 60 or above, print "Grade D",
   * else print "Grade F".
3. **Temperature Status** Write a C program that takes a temperature value as input and prints a message based on the following conditions:
   * if the temperature is above 30 degrees Celsius, print "It's a hot day",
   * else if the temperature is between 20 and 30, print "It's a warm day",
   * else if the temperature is between 10 and 19, print "It's a cool day",
   * else print "It's a cold day".
4. **Number Range Check** Write a C program that takes an integer input and checks if the number falls within different ranges:
   * if the number is between 1 and 10, print "The number is in the range 1-10",
   * else if the number is between 11 and 20, print "The number is in the range 11-20",
   * else if the number is between 21 and 30, print "The number is in the range 21-30",
   * else print "The number is outside the range 1-30".
5. **Traffic Light Simulation** Write a C program that simulates a traffic light system. Take a character input ('R', 'Y', 'G') representing Red, Yellow, and Green, respectively, and print:
   * if the input is 'R', print "Stop",
   * else if the input is 'Y', print "Get Ready",
   * else if the input is 'G', print "Go",
   * else print "Invalid input".