

- a. write a program that accepts marks of five subjects and finds percentage and prints grades according to the following criteria:
- Between 90-100%-----Print 'A'
 - 80-90%-----Print 'B'
 - 60-80%-----Print 'C'
 - Below 60%-----Print 'D'

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 float m1, m2, m3, m4, m5, total, percentage; 5 6 // Input marks for five subjects 7 printf("Enter marks of five subjects: "); 8 scanf("%f %f %f %f %f", &m1, &m2, &m3, &m4, &m5); 9 10 // Calculate total and percentage 11 total = m1 + m2 + m3 + m4 + m5; 12 percentage = total / 5; 13 14 // Print percentage 15 printf("Percentage = %.2f%%\n", percentage); 16 17 // Determine grade 18 if (percentage >= 90 && percentage <= 100) 19 printf("Grade: A\n"); 20 else if (percentage >= 80 && percentage < 90) 21 printf("Grade: B\n"); 22 else if (percentage >= 60 && percentage < 80) 23 printf("Grade: C\n"); 24 else 25 printf("Grade: D\n"); 26 27 return 0; 28 }</pre>	<pre>Enter marks of five subjects: 45 67 89 65 58 Percentage = 64.80% Grade: C === Code Execution Successful ===</pre>

- b. Write a C program that swaps values of two variables using a third variable.

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 int a, b, temp; 5 6 // Input two numbers 7 printf("Enter two numbers: "); 8 scanf("%d %d", &a, &b); 9 10 printf("Before swapping: a = %d, b = %d\n", a, b); 11 12 // Swapping using a third variable 13 temp = a; 14 a = b; 15 b = temp; 16 17 printf("After swapping: a = %d, b = %d\n", a, b); 18 19 return 0; 20 }</pre>	<pre>Enter two numbers: 3 5 Before swapping: a = 3, b = 5 After swapping: a = 5, b = 3 === Code Execution Successful ===</pre>

c. Write a C program to find the greatest of three numbers.

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 int a, b, c; 5 6 // Input three numbers 7 printf("Enter three numbers: "); 8 scanf("%d %d %d", &a, &b, &c); 9 10 // Compare numbers 11 if (a >= b && a >= c) 12 printf("Greatest number is: %d\n", a); 13 else if (b >= a && b >= c) 14 printf("Greatest number is: %d\n", b); 15 else 16 printf("Greatest number is: %d\n", c); 17 18 return 0; 19 }</pre>	<pre>Enter three numbers: 23 14 3 Greatest number is: 23 === Code Execution Successful ===</pre>

d. Write a C program that tells whether a given year is a leap year or not.

main.c	Output
<pre>1 #include <stdio.h> 2 3 int main() { 4 int year; 5 6 // Input year 7 printf("Enter a year: "); 8 scanf("%d", &year); 9 10 // Check for leap year 11 if ((year % 4 == 0 && year % 100 != 0) (year % 400 == 0)) 12 printf("%d is a leap year.\n", year); 13 else 14 printf("%d is not a leap year.\n", year); 15 16 return 0; 17 }</pre>	<pre>Enter a year: 2004 2004 is a leap year. === Code Execution Successful ===</pre>