**Qno.1)**

**#include <stdio.h>**

**int main() {**

**int a, b;**

**printf("Enter the first number: ");**

**scanf("%d", &a);**

**printf("Enter the second number: ");**

**scanf("%d", &b);**

**// Use bitwise XOR operator to swap the numbers**

**a = a ^ b;**

**b = a ^ b;**

**a = a ^ b;**

**printf("The first number is now: %d\n", a);**

**printf("The second number is now: %d\n", b);**

**return 0;**

**}**

**Qno.2)**

**#include <stdio.h>**

**int main() {**

**int num, reversed = 0;**

**printf("Enter a number: ");**

**scanf("%d", &num);**

**// Use a while loop to reverse the number**

**while (num != 0) {**

**reversed = reversed \* 10 + num % 10;**

**num /= 10;**

**}**

**printf("The reversed number is: %d\n", reversed);**

**return 0;**

**}**

**Qno.3)**

**#include <stdio.h>**

**int main() {**

**int num1, num2, num3;**

**int greatest;**

**printf("Enter the first number: ");**

**scanf("%d", &num1);**

**printf("Enter the second number: ");**

**scanf("%d", &num2);**

**printf("Enter the third number: ");**

**scanf("%d", &num3);**

**// Use if-else statements to find the greatest number**

**if (num1 > num2 && num1 > num3) {**

**greatest = num1;**

**} else if (num2 > num1 && num2 > num3) {**

**greatest = num2;**

**} else {**

**greatest = num3;**

**}**

**printf("The greatest number is: %d\n", greatest);**

**return 0;**

**}**

**Qno.4)**

**#include <stdio.h>**

**int main() {**

**int year;**

**printf("Enter a year: ");**

**scanf("%d", &year);**

**// Check if the year is a leap year**

**if ((year % 4 == 0 && year % 100 != 0) || year % 400 == 0) {**

**printf("%d is a leap year.\n", year);**

**} else {**

**printf("%d is not a leap year.\n", year);**

**}**

**return 0;**

**}**

**Qno.5)**

**#include <stdio.h>**

**int main() {**

**int num;**

**// Input a number from the user**

**printf("Enter a number: ");**

**scanf("%d", &num);**

**// Check if the number is even or odd**

**if (num % 2 == 0) {**

**printf("%d is even.", num);**

**} else {**

**printf("%d is odd.", num);**

**}**

**return 0;**

**}**

**Qno.6)**

**#include <stdio.h>**

**int main() {**

**int num;**

**// Input a number from the user**

**printf("Enter a number: ");**

**scanf("%d", &num);**

**// Shift the number 3 bits to the left**

**num = num << 3;**

**// Print the result**

**printf("Shifted number: %d", num);**

**return 0;**

**}**

**Qno.7)**

**#include <stdio.h>**

**int main()**

**{**

**char day;**

**printf("Enter m for Monday, t for Tuesday, w for Wednesday, h for Thursday, f for Friday, s for Saturday, u for Sunday: ");**

**scanf("%c", &day);**

**switch(day)**

**{**

**case 'm':**

**printf("Monday\n");**

**break;**

**case 't':**

**printf("Tuesday\n");**

**break;**

**case 'w':**

**printf("Wednesday\n");**

**break;**

**case 'h':**

**printf("Thursday\n");**

**break;**

**case 'f':**

**printf("Friday\n");**

**break;**

**case 's':**

**printf("Saturday\n");**

**break;**

**case 'u':**

**printf("Sunday\n");**

**break;**

**default:**

**printf("Invalid input\n");**

**}**

**return 0;**

**}**

**Qno.8)**

**#include <stdio.h>**

**int main()**

**{**

**int num1, num2, operator;**

**int result;**

**printf("Enter two numbers: ");**

**scanf("%d%d", &num1, &num2);**

**printf("Enter 1 for sum, 2 for multiply, 3 for subtraction, 4 for division: ");**

**scanf("%d", &operator);**

**switch(operator)**

**{**

**case 1:**

**result = num1 + num2;**

**printf("sum=%d\n", result);**

**break;**

**case 2:**

**result = num1 \* num2;**

**printf("multiplication=%d\n", result);**

**break;**

**case 3:**

**result = num1 - num2;**

**printf("subtraction=%d\n", result);**

**break;**

**case 4:**

**result = num1 / num2;**

**printf("division=%d\n", result);**

**break;**

**default:**

**printf("Invalid operator\n");**

**}**

**return 0;**

**}**

**Qno.9)**

**#include <stdio.h>**

**int main() {**

**int i, j;**

**for(i = 1; i <= 7; i++) {**

**if (i<=4) {**

**for(j = 1; j <= (2 \* i - 1); j++) {**

**printf("\*");**

**}**

**} else {**

**for(j = 1; j <= (2 \* (8 - i) - 1); j++) {**

**printf("\*");**

**}**

**}**

**printf("\n");**

**}**

**return 0;**

**}**