✅ Day 2: Conditional Statements

1. Write a program to check if a number is positive, negative, or zero.

2. Write a program to find the largest among three numbers.

3. Write a program to check if a year is a leap year.

4. Write a program to check whether a character is a vowel or consonant.

5. Write a program to assign grades based on marks.

6. Write a program to check whether a number is divisible by 5 and 11.

7. Write a program to find the absolute value of a number.

8. Write a menu-driven program to perform +, -, \*, / operations.

9. Write a program to find roots of a quadratic equation.

10. Write a program to find the number of digits in a number.

1. #include <stdio.h>

int main() {

int n;

scanf("%d", &n);

if(n > 0)

printf("Positive");

else if(n < 0)

printf("Negative");

else

printf("Zero");

return 0;

}

1. #include <stdio.h>
2. int main() {
3. int a, b, c;
4. scanf("%d%d%d", &a, &b, &c);
5. if(a >= b && a >= c)
6. printf("%d is largest", a);
7. else if(b >= a && b >= c)
8. printf("%d is largest", b);
9. else
10. printf("%d is largest", c);
11. return 0;
12. }

3. #include <stdio.h>

int main() {

int y;

scanf("%d", &y);

if((y % 4 == 0 && y % 100 != 0) || y % 400 == 0)

printf("Leap Year");

else

printf("Not Leap Year");

return 0;

}

4. #include <stdio.h>

int main() {

char ch;

scanf(" %c", &ch);

if(ch=='a'||ch=='e'||ch=='i'||ch=='o'||ch=='u'||ch=='A'||ch=='E'||ch=='I'||ch=='O'||ch=='U')

printf("Vowel");

else

printf("Consonant");

return 0;

}

5. #include <stdio.h>

int main() {

int m;

scanf("%d", &m);

if(m >= 90)

printf("Grade A");

else if(m >= 80)

printf("Grade B");

else if(m >= 70)

printf("Grade C");

else if(m >= 60)

printf("Grade D");

else

printf("Grade F");

return 0;

}

6. #include <stdio.h>

int main() {

int n;

scanf("%d", &n);

if(n % 5 == 0 && n % 11 == 0)

printf("Divisible by 5 and 11");

else

printf("Not Divisible");

return 0;

}

7. #include <stdio.h>

int main() {

int n;

scanf("%d", &n);

if(n < 0)

n = -n;

printf("%d", n);

return 0;

}

8. #include <stdio.h>

int main() {

int a, b, ch;

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

printf("1.Add 2.Sub 3.Mul 4.Div\n");

scanf("%d", &ch);

if(ch == 1)

printf("%d", a + b);

else if(ch == 2)

printf("%d", a - b);

else if(ch == 3)

printf("%d", a \* b);

else if(ch == 4)

printf("%d", a / b);

else

printf("Invalid");

return 0;

}

9. #include <stdio.h>

#include <math.h>

int main() {

float a, b, c, d, r1, r2;

scanf("%f%f%f", &a, &b, &c);

d = b\*b - 4\*a\*c;

if(d > 0) {

r1 = (-b + sqrt(d)) / (2\*a);

r2 = (-b - sqrt(d)) / (2\*a);

printf("Real and Distinct: %.2f %.2f", r1, r2);

} else if(d == 0) {

r1 = -b / (2\*a);

printf("Real and Equal: %.2f", r1);

} else {

float real = -b / (2\*a);

float imag = sqrt(-d) / (2\*a);

printf("Complex: %.2f + %.2fi, %.2f - %.2fi", real, imag, real, imag);

}

return 0;

}

10. #include <stdio.h>

int main() {

int n, c = 0;

scanf("%d", &n);

if(n == 0)

c = 1;

while(n != 0) {

c++;

n = n / 10;

}

printf("%d", c);

return 0;

}