# **Basic Programs**

**Ques 1.) Write a program to check even and odd.**

#include <stdio.h>

int main()

{

int n;

printf("ENTER A NUMBER\n");

scanf("%d", &n);

if(n%2==0)

printf("%d is an even number\n",n);

else if(n==1)

printf("%d is neither an even number nor an odd number\n",n);

else

printf("%d is an odd number\n",n);

return 0;

}

**Ques 2.) Write a program to check greatest of two numbers.**

#include <stdio.h>

int main()

{

int a;

int b;

printf("ENTER A NUMBER\n");

scanf("%d", &a);

printf("ENTER ANOTHER NUMBER\n");

scanf("%d", &b);

if(a>b)

printf("%d is greater than %d\n",a,b);

else if(b>a)

printf("%d is greater than %d\n",b,a);

else

printf("BOTH NUMBERS ARE EQUAL\n");

return 0;

}

**Ques 3.) Write a program to check greatest of three numbers.**

#include <stdio.h>

int main()

{

int a, b, c;

printf("Enter three numbers:\n");

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

if (a >= b && a>= c)

{

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

}

else if (b >= a && b >= c)

{

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

}

else

{

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

}

return 0;

}

**Ques 4.) Write a program to check whether it’s a leap year.**

#include <stdio.h>

int main()

{

int yr;

printf("Enter a year: ");

scanf("%d", &yr);

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

{

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

}

else

{

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

}

return 0;

}

**Ques 5.) Write a program to check if a number is positive negative or zero.**

#include <stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d", &n);

if (n>0)

{

printf("%d IS A POSITIVE NUMBER\n", n);

}

else if(n<0)

{

printf("%d IS A NEGATIVE NUMBER\n", n);

}

else

{

printf("%d IS ZER0\n", n);

}

return 0;

}

**Ques 6.) Write a program to check whether the alphabet is vowel or consonant.**

#include <stdio.h>

int main()

{

char ch;

printf("Enter an alphabet: ");

scanf(" %c", &ch);

if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z'))

{

if (ch >= 'A' && ch <= 'Z')

{

ch = ch + ('a' - 'A');

}

if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')

{

printf("'%c' is a vowel.\n", ch);

}

else

{

printf("'%c' is a consonant.\n", ch);

}

}

else

{

printf("Invalid input. Please enter an alphabet character.\n");

}

return 0;

}

**Ques 7.) Write a program of simple calculator.**

#include <stdio.h>

int main()

{

char operator;

double num1, num2, result;

printf("Simple Calculator\n");

printf("Choose an operation (+, -, \*, /): ");

scanf(" %c", &operator);

printf("Enter two numbers: ");

scanf("%lf %lf", &num1, &num2);

switch (operator)

{

case '+':

result = num1 + num2;

printf("Result: %.2lf\n", result);

break;

case '-':

result = num1 - num2;

printf("Result: %.2lf\n", result);

break;

case '\*':

result = num1 \* num2;

printf("Result: %.2lf\n", result);

break;

case '/':

if (num2 != 0) {

result = num1 / num2;

printf("Result: %.2lf\n", result);

}

else

{

printf("Error: Division by zero is not allowed.\n");

}

break;

default:

printf("Invalid operator.\n");

}

return 0;

}

**Ques8.) Write a program to check number divisibility.**

#include <stdio.h>

int main()

{

int dividend, divisor;

printf("Enter the dividend: ");

scanf("%d", &dividend);

printf("Enter the divisor: ");

scanf("%d", &divisor);

if (divisor == 0)

{

printf("Error: Division by zero is not allowed.\n");

}

else

{

if (dividend % divisor == 0)

{

printf("%d is divisible by %d.\n", dividend, divisor);

}

else

{

printf("%d is not divisible by %d.\n", dividend, divisor);

}

}

return 0;

}

**Ques 9.) Write a program of Grade calculation.**

#include <stdio.h>

int main()

{

int marks;

printf("Enter your marks (0–100): ");

scanf("%d", &marks);

if (marks < 0 || marks > 100) {

printf("Invalid marks. Please enter a value between 0 and 100.\n");

}

else {

if (marks >= 90)

{

printf("Grade: A\n");

}

else if (marks >= 80)

{

printf("Grade: B\n");

}

else if (marks >= 70)

{

printf("Grade: C\n");

}

else if (marks >= 60)

{

printf("Grade: D\n");

}

else if (marks >= 50)

{

printf("Grade: E\n");

}

else

{

printf("Grade: F (Fail)\n");

}

}

return 0;

}

**Ques 10.) Write a program to check Uppercase or Lowercase Alphabet.**

#include <stdio.h>

int main()

{

char ch;

printf("Enter a single alphabet character: ");

scanf(" %c", &ch);

if ((ch >= 'A' && ch <= 'Z') || (ch >= 'a' && ch <= 'z'))

{

if (ch >= 'A' && ch <= 'Z')

{

printf("'%c' is an uppercase letter.\n", ch);

}

else

{

printf("'%c' is a lowercase letter.\n", ch);

}

}

else

{

printf("'%c' is not an alphabet character.\n", ch);

}

return 0;

}