Q.1 Write a program to check whether a given number is positive or non-positive

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num > 0)

printf("\npositive");

else

printf("\nnon-positive");

return 0;

}

Q.2 Write a program to check whether a given number is divisible by 5 or not

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num % 5 == 0)

printf("\nNumber is divisible by 5");

else

printf("\nNumber is not divisible by 5");

return 0;

}

Q.3 Write a program to check whether a given number is an even number or an odd number

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num % 2 == 0)

printf("\nEven number");

else

printf("\nOdd number");

return 0;

}

Q.4 Write a program to check whether a given number is an even number or an odd number without using % operator.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

num & 1 ? printf("Odd number") : printf("Even number");

return 0;

}

Q.5 Write a program to check whether a given number is a three-digit number or not

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, count;

printf("Enter number = ");

scanf("%d", &num);

for (count = 1; num /= 10; count++);

if (count == 3)

printf("Number is three digit");

else

printf("Number is not three digit");

return 0;

}

Q.6 Write a program to print greater between two numbers. Print one number of both are the same

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a, b;

printf("Enter three number = ");

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

if (a > b)

printf("Greater number = %d", a);

else if (a < b)

printf("Greater number = %d", b);

else

printf("%d", a);

return 0;

}

Q.7 Write a program to check whether roots of a given quadratic equation are real & distinct, real & equal or imaginary roots

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a, b, c;

printf("Enter value for a, b and c = ");

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

int d = (b \* b) - (4 \* a \* c);

if (d > 0)

printf("Real & Distinct");

else if (d == 0)

printf("Real & Equal");

else

printf("Imaaginary");

return 0;

}

Q.8 Write a program to check whether a given year is a leap year or not.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int year;

printf("Enter year = ");

scanf("%d", &year);

if (year % 4 == 0)

printf("This is a leap year");

else

printf("This is not a leap year");

return 0;

}

Q.9 Write a program to find the greatest among three given numbers. Print number once if the greatest number appears two or three times.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a, b, c;

printf("Enter three number = ");

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

if (a > b)

if (a > c)

printf("Greater number = %d", a);

else

printf("Greater number = %d", c);

else if (b > c)

printf("Greater number = %d", b);

else

printf("Greater number = %d", c);

return 0;

}

Q.10 Write a program which takes the cost price and selling price of a product from the user. Now calculate and print profit or loss percentage.

#include <stdio.h>

int main(int argc, char \*argv[])

{

float cp, sp, profit, loss;

printf("Enter cost price = ");

scanf("%f", &cp);

printf("Enter selling price = ");

scanf("%f", &sp);

if (cp > sp)

printf("Loss percentage = %.2f%%", ((cp - sp) / cp) \* 100);

else

printf("Profit percentage = %.2f%%", ((sp - cp) / cp) \* 100);

return 0;

}

Q.11 Write a program to take marks of 5 subjects from the user. Assume marks are given out of 100 and passing marks is 33. Now display whether the candidate passed the examination or failed

#include <stdio.h>

int main(int argc, char \*argv[])

{

int s1, s2, s3, s4, s5;

printf("Enter marks for 5 subject = ");

scanf("%d%d%d%d%d,", &s1, &s2, &s3, &s4, &s5);

33)

if (s1 >= 33 && s2 >= 33 && s3 >= 33 && s4 >= 33 && s5 >=

printf("Examination passed");

else

printf("Examination failed");

return 0;

}

Q.12 Write a program to check whether a given alphabet is in uppercase or lowercase.

#include <stdio.h>

int main(int argc, char \*argv[])

{

char ch;

printf("Enter alphabet = ");

scanf("%c", &ch);

if (ch >= 'a' && ch <= 'z')

printf("Lowercase");

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

printf("Uppercase");

else

printf("wrong input");

return 0;

}

Q.13 Write a program to check whether a given number is divisible by 3 and divisible by 2.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num % 3 == 0 && num % 2 == 0)

printf("Number is divisible by 3 and 2");

else

printf("Number is not divisible by 3 and 2");

return 0;

}

Q.14 Write a program to check whether a given number is divisible by 7 or divisible by 3.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num % 7 == 0 || num % 3 == 0)

printf("Number is divisible by 7 OR divisible by 3");

else

printf("number is not divisible");

return 0;

}

Q.15 Write a program to check whether a given number is positive, negative or zero.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter number = ");

scanf("%d", &num);

if (num < 0)

printf("Number is negative");

else if (num > 0)

printf("Number is positive");

else

printf("Number is zero");

return 0;

}

Q.16 Write a program to check whether a given character is an alphabet (uppercase), an alphabet (lower case),a digit or a special character.

#include <stdio.h>

int main(int argc, char \*argv[])

{

char ch;

printf("Enter character = ");

scanf("%c", &ch);

if (ch <= 'a' && ch >= 'z')

printf("Lowercase");

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

printf("Uppercase");

else if (ch >= '0' && ch <= '9')

printf("digit");

else

printf("Special symbol");

return 0;

}

Q.17 Write a program which takes the length of the sides of a triangle as an input. Display whether the triangle is valid or not

#include <stdio.h>

int main(int argc, char \*argv[])

{

float a, b, c;

printf("Enter length of the sides of an triangle = ");

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

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

printf("This triangle is valid");

else

printf("This triangle is not valid");

return 0;

}

Q.18 Write a program which takes the month number as an input and display number of days in that month

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num;

printf("Enter month number = ");

scanf("%d", &num);

if (num >= 1 && num <= 7)

if (num % 2 != 0)

printf("31 Days");

else if (num == 2)

printf("28 or 29 Days");

else

printf("30 Days");

else if (num % 2 == 0)

printf("31 Days");

else

printf("30 Days");

return 0;

}