/\*1. Write a program to check whether a given number is positive or non-positive.

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n>0)

printf("\nNumber is positive");

else

printf("\nNumber is non-positive");

return 0;

}

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

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n%5)

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

else

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

return 0;

}

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

number

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n%2)

printf("\nOdd number");

else

printf("Even number");

return 0;

}

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 n,x;

printf("Enter a number: ");

scanf("%d",&n);

x=n&1;

if(x==1)

printf("\nOdd number");

else

printf("\nEven number");

return 0;

}

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

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n>99 && n<1000)

printf("\nThis is a three digit number");

else

printf("\nThis is not a three digit number");

return 0;

}

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

the same.

#include<stdio.h>

int main()

{

int a,b;

printf("Enter two numbers: ");

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

if(a>b)

printf("\nGreater number is %d",a);

else

printf("\nGreater number is %d",b);

return 0;

}

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 a,b,c,d;

printf("Enter values of a , b and c of a quadratic equation: ");

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

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

if(d>0)

printf("\nRoots are real and distinct");

if(d==0)

printf("\nRoots are real and equal");

if(d<0)

printf("\nRoots are imaginary");

return 0;

}

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

#include<stdio.h>

int main()

{

int y;

printf("Enter a year: ");

scanf("%d",&y);

if(y%100)

if(y%4)

printf("\nThis is not a leap year");

else

printf("\nThis is a leap year");

else

if(y%400)

printf("\nThis is not a leap year");

else

printf("\nThis is a leap year");

return 0;

}

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 a,b,c;

printf("Enter three numbers: ");

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

if(a>b)

if(a>c)

printf("\n%d",a);

else

printf("\n%d",c);

else

if(b>c)

printf("\n%d",b);

else

printf("\n%d",c);

return 0;

}

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 cp,sp;

printf("Enter cost price of a product: ");

scanf("%d",&cp);

printf("\nEnter selling price of a product: ");

scanf("%d",&sp);

if(sp>cp)

printf("\nProfit is %d%%",(sp-cp)\*100/cp);

else

printf("\nLoss is %d%%",(cp-sp)\*100/cp);

return 0;

}

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 a,b,c,d,e;

printf("Enter marks of 5 subjects: ");

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

if(a>32&&b>32&&c>32&&d>32&&e>32)

printf("\nPass");

else

printf("\nFail");

return 0;

}

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

#include<stdio.h>

int main()

{

char ch;

printf("Enter an alphabet: ");

scanf("%c",&ch);

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

printf("\nUppercase");

else

printf("\nLowercase");

return 0;

}

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

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n%2)

if(n%3)

printf("\nNot divisible by 2 and 3");

else

printf("\nDivisible by 3");

else

if(n%3)

printf("\nDivible by 2");

else

printf("\nDivisible by 2 and 3");

return 0;

}

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

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n%3)

if(n%7)

printf("\nNot divisible by 7 or 3");

else

printf("\nDivisible by 7");

else

if(n%7)

printf("\nDivible by 3");

else

printf("\nDivisible by 7 and 3");

return 0;

}

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

#include<stdio.h>

int main()

{

int n;

printf("Enter a number: ");

scanf("%d",&n);

if(n>=0)

if(n==0)

printf("\nZero");

else

printf("\nPositive number");

else

printf("\nNegative number");

return 0;

}

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()

{

char ch;

printf("Enter a character: ");

scanf("%c",&ch);

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

printf("\nUpper case");

else

{

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

printf("\nLower case");

else

{

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

printf("\nDigit");

else

printf("\nSpecial character");

}

}

return 0;

}

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 a,b,c;

printf("Enter lenth of the sides of a triangle: ");

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

if(c<a+b&&b<a+c&&a<b+c)

printf("\nTriangle is valid");

else

printf("\nTriangle is not valid");

return 0;

}

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 n;

printf("Enter month number: ");

scanf("%d",&n);

if(n==1||n==3||n==5||n==7||n==8||n==10||n==12)

printf("\n31 days");

else

if(n==4||n==6||n==9||n==11)

printf("\n30 days");

else

if(n==2)

printf("\n28 days");

else

printf("\nInvalid month number");

return 0;

}