Q1. //Write a program to check whether a given number is positive or non-positive

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n>0)

printf("Positive");

else

printf("Non - Positive");

getch();

}

Q2. //Write a program to check whether a given number is divisible by 5 or not

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n%5==0)

printf("Divisible");

else

printf("Not");

getch();

}

Q3. //Write a program to check whether a given number is an even number or an odd number.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n%2==0)

printf("Even");

else

printf("Odd");

getch();

}

Q4. //Write a program to check whether a given number is an even number or an odd number without using % operator.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n&1==1)

printf("Odd");

else

printf("Even");

getch();

}

Q5. //Write a program to check whether a given number is a three-digit number or not.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n>99&&n<1000)

printf("Three Digit Number");

else

printf("Not");

getch();

}

Q6. //Write a program to print greater between two numbers. Print one number of both are the same.

main()

{

int n1,n2;

printf("Enter any two numbers : ");

scanf("%d%d",&n1,&n2);

if(n1>n2)

printf("The Greatest number is = %d",n1);

else if(n1==n2)

printf("Both are the same number = %d",n2);

else

printf("The Greatest number is = %d",n2);

getch();

}

Q7. //Write a program to check whether roots of a given quadratic equation are real & distinct, real & equal or imaginary roots

main()

{

int a,b,c,dist = b\*b-4\*a\*c;

printf("Enter the value of a b c : ");

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

if(dist>0)

printf("Real and Distinct");

else if(dist<0)

printf("Imahinery");

else

printf("Real & Equal");

getch();

}

Q8. //Write a program to check whether a given year is a leap year or not.

main()

{

int y;

printf("Enter a year : ");

scanf("%d",&y);

if(y%4==0)

printf("Leap Year");

else

printf("Not");

getch();

}

Q9. //Write a program to find the greatest among three given numbers. Print number once if the greatest number appears two or three times.

main()

{

int n1,n2,n3;

printf("Enter three numbers : ");

scanf("%d%d%d",&n1,&n2,&n3);

if(n1==n2==n3)

{

printf("Number : %d",n1);

}

else

{

if(n1>n2&&n1>n3)

printf(" Number : %d",n1);

else if(n2>n3)

printf("Number : %d",n2);

else

printf("Number : %d",n3);

}

getch();

}

Q10. //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.

main()

{

float c,s,p,l;

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

scanf("%d",&c);

printf("Enter the selling price of the product : ");

scanf("%d",&s);

if(c<s)

{

p=s-c;

p=(p/c)\*100;

printf("Profit = %2.f%%",p);

}

else

{

l=c-s;

l=(l\*100)/c;

printf("Loss = %2.f%%",l);

}

getch();

}

Q11. //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.

main()

{

float p,c,m,h,e,sum=0,result=0;

printf("Enter the marks of five subjects out of 100 : ");

scanf("%f%f%f%f%f",&p,&c,&m,&h,&e);

sum=p+c+m+e+h;

if(sum<500)

{

result=(sum/500)\*100;

printf("Result = %2.f%%\n",result);

if(result>33)

printf("Passed");

else

printf("Failed");

}

else

printf("Invalid Marks in any one of them Subjects!!\n Please Enter the Correct Marks");

getch();

}

Q12. //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.

main()

{

float p,c,m,h,e,sum=0,result=0;

printf("Enter the marks of five subjects out of 100 : ");

scanf("%f%f%f%f%f",&p,&c,&m,&h,&e);

sum=p+c+m+e+h;

if(sum<500)

{

result=(sum/500)\*100;

printf("Result = %2.f%%\n",result);

if(result>33)

printf("Passed");

else

printf("Failed");

}

else

printf("Invalid Marks in any one of them Subjects!!\n Please Enter the Correct Marks");

getch();

}

Q13. //Write a program to check whether a given number is divisible by 3 and divisible by 2.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n%2==0)

printf("Divisible By 2");

else if(n%3==0)

printf("Divisible By 3");

else

printf("The Number is not Divisible By 2 or 3");

getch();

}

Q14. //Write a program to check whether a given number is divisible by 3 and divisible by 7.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n%7==0)

printf("Divisible By 7");

else if(n%3==0)

printf("Divisible By 3");

else

printf("The Number is not Divisible By 7 or 3");

getch();

}

Q15. //Write a program to check whether a given number is positive, negative or zero.

main()

{

int n;

printf("Enter a number : ");

scanf("%d",&n);

if(n==0)

printf("Zero");

else

{

if(n>0)

printf("Positive");

else

printf("Negative");

}

getch();

}

Q16. //Write a program to check whether a given character is an alphabet (uppercase), an alphabet (lower case), a digit or a special character.

main()

{

char ch;

printf("Enter a character, digit or special character any one of them : ");

scanf("%c",&ch);

if(ch>=0&&ch<=47)

printf("Special Character ");

else if(ch>=48&&ch<=57)

printf("Digit");

else if(ch>=58&&ch<=64)

printf("Special Character ");

else if(ch>=65&&ch<=90)

printf("Upper case Alphabet");

else if(ch>=91&&ch<=96)

printf("Special Chaacter");

else if(ch>=97&&ch<=122)

printf("Alphabet Lower Case");

else

printf("Special Character");

getch();

}

Q17. //Write a program which takes the length of the sides of a triangle as an input. Display whether the triangle is valid or not.

main()

{

int h,b,area;

printf("Enter the Hight and Base of triangle : ");

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

area = (h\*b)/2;

if(area>0)

printf("Valid");

else

printf("Invalid");

getch();

}

Q18. //Write a program which takes the month number as an input and display number of days in that month

main()

{

int n;

printf("Enter the Number of Month : ");

scanf("%d",&n);

if(n>0&&n<=12)

{

if(n==2)

printf("Days in this month are 28");

else

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

printf("Days in this month are 30");

else

printf("Days in this month are 31");

}

else

printf("Invalid Number of month!! Please enter a valid number");

getch();

}