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

main()

{

int x;

printf("Enter a number : ");

scanf("%d",&x);

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

printf("%d is divisible by 2 & 3",x);

else

printf("not divisible");

return 0;

}

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

main()

{

int x;

printf("Enter a number : ");

scanf("%d",&x);

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

printf("%d is divisible by 7 & 3",x);

else

printf("not divisible");

return 0;

}

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

main()

{

int x;

printf("Enter a number : ");

scanf("%d",&x);

if(x>0)

printf("%d is positive",x);

else if(x<0)

printf("%d is negetive",x);

else

printf("zero");

return 0;

}

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

main()

{

int x;

printf("Enter a number : ");

scanf("%d",&x);

if(x%4==0)

printf("Leap year");

else

printf("non leap year");

return 0;

}

5. Write a program to find greater among three numbers. If two or three numbers are

identical and greatest among all then print it only once.

#include<stdio.h>

#include<conio.h>

int main()

{

int a,b,c;

printf("enter a number");

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

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

printf("%d is greatest",a);

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

printf("%d is greatest",b);

else

printf("%d is greatest",c);

getch();

return 0;

}

6. 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 charactor\n");

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 charctor");

}

getch();

return 0;

}

7. 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 a,b,c;

printf("enter sides of triangle");

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

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

printf("triangle is valid");

else

printf("triangle is invalid");

getch();

return 0;

}

8. Write a program which takes the month number as an input and display number of

days in that month.

main()

{

int y;

printf("enter month number");

scanf("%d",&y);

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

printf("31 days");

else if(y==4 ||y==6||y==9 ||y==11)

printf("30 days");

else if(y==2)

printf("28/29 days");

else

printf("invalid month");

getch();

return 0;

}

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

main()

{

int a,b,c,D;

printf("enter the coefficent of x^2,coefficent of x,constant term");

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

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

if(D>0){

printf("two distinct real roots");

}

if(D==0){

printf("equal roots");

}

if(D<0){

printf("no real roots");

}

10.Write a C program to input marks of five subjects Physics, Chemistry, Biology,

Mathematics and Computer. Calculate percentage and grade according to following:

Percentage >= 90% : Grade A

Percentage >= 80% : Grade B

Percentage >= 70% : Grade C

Percentage >= 60% : Grade D

Percentage >= 40% : Grade E

Percentage < 40% : Grade F

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main()

{

int P,C,B,M,COM,percent;

printf("enter marks ");

scanf("%d %d %d %d %d",&P,&C,&B,&M,&COM);

getch();

printf("physics: %d\nchemistry: %d\nbiology: %d\nMaths: %d\ncomputer: %d\n",P,C,B,M,COM);

percent=(P+C+B+M+COM)\*100/500;

if(percent>=90)

printf("GRADE A");

else if(percent>=80)

printf("GRADE B");

else if(percent>=70)

printf("GRADE C");

else if(percent>=60)

printf("GRADE D");

else if(percent>=40)

printf("GRADE E");

else if(percent<40)

printf("GRADE F");

getch();

return 0;

}