

1:-

```
#include<stdio.h>

int main()
{
    int x;
    printf("Enter a number:\n");
    scanf("%d",&x);
    if(x%3==0&&x%2==0)
        printf("divisible");
    else
        printf("not divisible");
    return 0;
}
```

2:-

```
#include<stdio.h>

int main()
{
    int x;
    printf("Enter a number:\n");
    scanf("%d",&x);
    if(x%7==0 | x%3==0)
        printf("divisible");
    else
        printf("not divisible");
}
```

```
        return 0;
    }
```

3:-

```
#include<stdio.h>

int main()
{
    int x;
    printf("Enter a number:\n");
    scanf("%d",&x);
    if(x>0)
        printf("positive");
    else if(x==0)
        printf("zero");
    else
        printf("negative");
    return 0;
}
```

4:-

```
#include<stdio.h>

int main()
{
    int x;
    printf("Enter a year:\n");
```

```
scanf("%d",&x);  
if(x%400==0 || x%4==0)  
    printf("leap year");  
else if(x%100==0)  
    printf("Not a leap year");  
else  
    printf("Not a leap year");  
return 0;  
}
```

5:-

```
#include<stdio.h>  
  
int main(){  
    int a,b,c,k;  
    printf("Enter a 3 digits:\n");  
    scanf("%d %d %d",&a,&b,&c);  
    if(a>b&&a>c)  
        k=a;  
    else if(b>a&&b>c)  
        k=b;  
    else  
        k=c;  
    printf("greater is %d",k);  
}
```

6:-

```
#include<stdio.h>
```

```
int main(){  
    char x;  
    printf("Enter a character:\n");  
    scanf("%c",&x);  
    if(x>='A'&&x<='Z')  
        printf("Uppercase");  
    else if(x>='a'&&x<='z')  
        printf("Lowercase");  
    else if(x>='0'&&x<='9')  
        printf("Digit");  
    else  
        printf("Special character");  
    return 0;  
}
```

7:-

```
#include<stdio.h>
```

```
int main(){  
    int l1,l2,l3;  
    printf("Enter the length of the sides of a triangle:\n");  
    scanf("%d %d %d",&l1,&l2,&l3);
```

```

        if (l1+l2>l3)
            printf("Triangle is valid");
        else
            printf("Triangle is not valid");
        return 0;
    }

```

8:-

```
#include<stdio.h>
```

```

    int main(){
        int m;
        printf("Enter the month number:\n");
        scanf("%d",&m);
        if(m==1 || m==3 || m==5 || m==7 || m==8 || m==10 ||
m==12)
            printf("31 days in that month");
        else if(m==2)
            printf("28/29 days in that month");
        else
            printf("30 days in that month");
        return 0;
    }

```

9:-

```
#include<stdio.h>
```

```
#include<math.h>
```

```
int main(){  
    int a,b,c,D;  
    float x,y;  
    printf("Enter coefficient of quadratic equation:\n");  
    scanf("%d %d %d", &a, &b, &c);  
    D=b*b-4*a*c;  
    if(D==0){  
        printf("Roots are equal");  
        x=-b/(2.0*a);  
        printf("Root is %.2f",x);  
    }  
    if(D>0){  
        printf("Roots are real and distinct");  
        x=(-b+sqrt(D))/(2*a);  
        y=(-b-sqrt(D))/(2*a);  
        printf("\n Roots are: %.2f %.2f",x,y);  
    }  
    if(D<0)  
        printf("Roots are imaginary");  
    return 0;  
}
```

10:-

```
#include<stdio.h>

int main()
{
    int a,b,c,d,e;
    float per;
    printf("Enter the marks of five subjects:\n");
    scanf("%d%d%d%d%d",&a,&b,&c,&d,&e);
    per=(a+b+c+d+e)/5.0;
    printf("Percentage is:-%.2f\n",per);
    if(per<40)
        printf("Grade F");
    else if(per<=40)
        printf("Grade E");
    else if(per<=60)
        printf("Grade D");
    else if(per<=70)
        printf("Grade C");
    else if(per<=80)
        printf("Grade B");
    else
        printf("Grade A");
    return 0;
}
```

