

1.

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

```
int main()
```

```
{
```

```
    int x;
```

```
    scanf("%d",&x);
```

```
    if(x>0)
```

```
        printf("Postive");
```

```
    else
```

```
        printf("Negative");
```

```
}
```

2.

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

```
int main()
```

```
{
```

```
    int x;
```

```
    scanf("%d",&x);
```

```
    if(x%5==0)
```

```
        printf("Divisible by 5");
```

```
    else
```

```
        printf("Not Divisible by 5");
```

```
}
```

3.

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

```
int main()
```

```
{
```

```
    int x;
```

```
    scanf("%d",&x);
```

```
    if(x%2==0)
```

```
        printf("even");
```

```
    else
```

```
        printf("odd");
```

```
}
```

4.

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

```
int main()
```

```
{
```

```
    int x;
```

```
    scanf("%d",&x);
```

```
    if((x&1)==0)
```

```
        printf("even");
```

```
    else
```

```
        printf("odd");
```

```
}
```

5.

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

```
int main()
```

```
{
```

```
    int x;
```

```
    scanf("%d",&x);
```

```
    for(int i=0;i<2;i++)
```

```
    {
```

```
        x=x/10;
```

```
    }
```

```
    if(x<9&&x!=0)
```

```
        printf("three digit number");
```

```
}
```

6.

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

```
int main()
```

```
{
```

```
    int x,y;
```

```
    scanf("%d %d",&x,&y);
```

```
    if(x>y)
```

```
printf("%d is greater",x);
```

```
else if(x>y)
```

```
printf("%d is greater",y);
```

```
else
```

```
printf("equal");
```

```
}
```

7.

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

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

```
int main() {
```

```
    double a, b, c, discriminant, root1, root2, realPart, imagPart;
```

```
    printf("Enter coefficients a, b and c: ");
```

```
    scanf("%lf %lf %lf", &a, &b, &c);
```

```
    discriminant = b * b - 4 * a * c;
```

```
    if (discriminant > 0) {
```

```
        root1 = (-b + sqrt(discriminant)) / (2 * a);
```

```
        root2 = (-b - sqrt(discriminant)) / (2 * a);
```

```
        printf("root1 = %.2lf and root2 = %.2lf", root1, root2);
```

```
    }
```

```
    else if (discriminant == 0) {
```

```
        root1 = root2 = -b / (2 * a);
```

```
        printf("root1 = root2 = %.2lf;", root1);
```

```
    }
```

```
    else {
```

```
        realPart = -b / (2 * a);
```

```
        imagPart = sqrt(-discriminant) / (2 * a);
```

```
        printf("root1 = %.2lf+%.2lfi and root2 = %.2f-%.2fi", realPart, imagPart, realPart, imagPart);
```

```
    }
```

```
    return 0;
}
```

8.

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

```
int main() {
    int x;
    scanf("%d",&x);
    if(x%4==0 | x%400==0)
    {
        printf("leapyear");
    }
    else
        printf("not leapyear");
}
```

9.

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

```
int main() {
    int x,y,z;
    scanf("%d %d %d",&x,&y,&z);
    if(x>y && x>z)
        printf("%d is greater",x);
    if(y>x && y>z)
        printf("%d is greater",y);
    else
        printf("%d is greater",z);
}
```

10.

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

```
int main() {  
    int x,y;  
    double profit;  
    scanf("%d %d",&x,&y);  
    profit=((float)(y-x)/x)*100;  
    if(profit>0)  
        printf("profit %lf",profit);  
    else  
        printf("loss %lf",profit*-1);  
  
}
```

11.

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

```
int main() {  
    int x1,x2,x3,x4,x5;  
    scanf("%d %d %d %d %d",&x1,&x2,&x3,&x4,&x5);  
    if(x1>33&&x2>33&&x3>33&&x4>33&&x5>33)  
    {  
        printf("pass");  
    }  
    else  
        printf("fail");  
}
```

12.

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

```
int main() {  
    char ch;  
    scanf("%c",&ch);
```

```

        if (ch >= 'A' && ch <= 'Z')
        {
            printf("Upppercase");
        }
    else if (ch >= 'a' && ch <= 'z')
    {
        printf("Lowercase");
    }

}

```

13.

```

#include <stdio.h>

int main() {
    int x;
    scanf("%d",&x);
    if(x%2==0&& x%3==0)
        printf("Divisible by 2 and 3");
    else
        printf("NOT Divisible by 2 and 3");

}

```

14.

```

#include <stdio.h>

int main() {
    int x;
    scanf("%d",&x);
    if(x%7==0 | x%3==0)
        printf("Divisible by 7 or 3");
}

```

```
else  
    printf("NOT Divisible by 2 or 3");  
  
}
```

15.

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

```
int main()  
{  
    int x;  
    scanf("%d",&x);  
    if(x>0)  
        printf("Postive");  
    else if (x<0)  
        printf("Negative");  
    else if (x==0)  
        printf("Zero");  
}
```

16.

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

```
int main() {  
    char ch;  
    scanf("%c",&ch);  
    if (ch >= 'A' && ch <= 'Z')  
    {  
        printf("Upppercase");  
    }  
    else if (ch >= 'a' && ch <= 'z')  
    {
```



```

        printf("Lowercase");
    }
    else
    {
        printf("Special character");
    }

}

```

17.

```

#include <math.h>#include <stdio.h>

int main() {
    int x,y,z;
    scanf("%d%d%d",&x,&y,&z);
    if(x+y>z | y+z>x | x+z>y)
    {
        printf("triangle posible");
    }
    else
        printf("Not posible");
}

```

18.

```

#include <math.h>#include <stdio.h>

int main() {
    int x;
    scanf("%d",&x);
    if(x==1)
        printf("january");
    else if(x==2)

```

```
printf("february");  
else if(x==3)  
printf("march");  
else if(x==4)  
printf("april");  
else if(x==5)  
printf("may");  
else if(x==6)  
printf("june");  
else if(x==7)  
printf("july");  
else if(x==8)  
printf("august");  
else if(x==9)  
printf("september");  
else if(x==10)  
printf("october");  
else if(x==11)  
printf("november");  
else if(x==12)  
printf("december");  
else  
printf("Not valid");
```

}