

(1)

```
#include<stdio.h>

int main()
{
    int x;

    printf("Enter the number to check positive non positive\n");
    scanf("%d",&x);
    if(x>0)
        printf("Number is positive");
    else
        printf("Number is non positive");
    return 0;
}
```

(2)

```
#include<stdio.h>

int main()
{
    int x;

    printf("Enter the number\n");
    scanf("%d",&x);
    if(x=x%5==0)
        printf("Number is divisible by 5");
    else
        printf("Number is not divisible by 5");
    return 0;
}
```

(3)

```
#include<stdio.h>

int main()
```

```
{  
    int x;  
    printf("Enter the number to check even or odd\n");  
    scanf("%d",&x);  
    if(x%2==0)  
        printf("Number is even");  
    else  
        printf("Number is odd");  
    return 0;  
}
```

(4)

```
#include<stdio.h>  
  
int main()  
{  
    int x;  
    printf("Enter a number to check even odd\n");  
    scanf("%d",&x);  
    if(x&1==1)  
        printf("Number is odd");  
    else  
        printf("Number is even");  
    return 0;  
}
```

(5)

```
#include<stdio.h>  
  
int main()  
{  
    int x;  
    printf("Enter the number\n");
```

```

scanf("%d",&x);
if((x>99)&&(x<1000))
    printf("Number is three digits");
else
    printf("Number is not three digits");
return 0;
}

```

(6)

```

#include<stdio.h>
int main()
{
    int number1,number2;
    printf("Enter the number\n");
    scanf("%d",&number1);
    printf("Enter the number\n");
    scanf("%d",&number2);
    if(number1>number2)
        printf("%d is greater number",number1);
    else if(number1==number2)
        printf("Both are equal");
    else
        printf("%d is greater number",number2);
    return 0;
}

```

(7)

```

#include<stdio.h>
int main()
{
    float a,b,c,discriminant;

```

```

printf("Enter coefficients a,b and c\n");
scanf("%1f %1f %1f",&a, &b, &c);
discriminant = b * b - 4 * a * c;
if (discriminant > 0){
    printf("Real and distinct");
} else if (discriminant == 0)
    printf("Roots are real and equal");
else if (discriminant < 0)
    printf("Roots are imaginary");
return 0;

}

```

(8)

```

#include<stdio.h>
int main()
{
    int year;
    printf("Enter the year number\n");
    scanf("%d",&year);
    if((year%4==0)&&(year%100!=0) || (year%400==0))
        printf("Year is a leap year");
    else
        printf("Year is not leap year");
    return 0;
}

```

(9)

```

#include<stdio.h>
int main()

```

```

{
    int x=20,y=15,z=10;
    if((x>y)&&(x>z))
        printf("%d is greatest number",x);
    else if((y>x)&&(y>z))
        printf("%d is greatest number",y);
    else if((x==y) || (y==z) || (z==x))
        printf("Greatest numkber is repeated");
    else
        printf("%d is greatest number",z);
    return 0;
}

```

(10)

```

#include<stdio.h>

int main()
{
    float SP,CP,profit,loss;
    printf("Enter the cost of selling price\n");
    scanf("%f",&SP);
    printf("Enter the Cost price\n");
    scanf("%f",&CP);
    if((SP-CP)>0)
    {
        profit=(SP-CP)/CP*100;
        printf("Profit is %.1fpercent",profit);
    } else if(SP-CP<0)
    {
        loss=(CP-SP)/CP*100;
        printf("Loss is %.1fpercent",loss);
    }
}

```

```

    return 0;
}
(11)
#include<stdio.h>
int main()
{
    float s1,s2,s3,s4,s5,total_marks,percentage;
    printf("Enter five subject marks\n");
    scanf("%f%f%f%f%f",&s1,&s2,&s3,&s4,&s5);
    total_marks = (s1 + s2 + s3 + s4 + s5);
    printf("Total marks is %f\n",total_marks);
    percentage = ((total_marks/500)*100);
    printf("Parcentage is %f\n",percentage);
    if(percentage>33)
        printf("Passed\n");
    else
        printf("Condidate failed");
        return 0;
}

```

```

(12)
#include<stdio.h>
int main()
{
    char check = 'A';
    if((check >= 65)&&(check <= 90))
        printf("Uppercase");
    else if((check>=97)&&(check<=122))
        printf("Lowercase");
    return 0;
}

```

```
}
```

(13)

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

```
int main()
```

```
{
```

```
    int x=18;
```

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

```
        printf("Number is divisible by 2 and 3");
```

```
    else
```

```
        printf("Number is not divisible");
```

```
    return 0;
```

```
}
```

(14)

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

```
int main()
```

```
{
```

```
    int x=21;
```

```
    if((x%3==0)&&(x%7==0))
```

```
        printf("Number is divisible by 3 and 7");
```

```
    else
```

```
        printf("Not divisible");
```

```
    return 0;
```

```
}
```

(15)

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

```
int main()
```

```
{
```

```
    int x;
```

```
    printf("Enter the number\n");
```

```
scanf("%d",&x);  
if(x>0)  
    printf("Positive number");  
else if(x<0)  
    printf("Negative number");  
else  
    printf("Zero");  
return 0;  
}
```

(16)

```
#include<stdio.h>  
int main()  
{  
    char check = 'A';  
    if((check>=48)&&(check<=57))  
        printf("character is digit");  
    else if ((check>=65)&&(check<=90))  
        printf("Uppercase");  
    else if((check>=97)&&(check<=122))  
        printf("Lowercase");  
    else  
        printf("Special character");  
    return 0;  
}
```

(17)

```
#include<stdio.h>  
int main()  
{  
    int a=5,b=9,c=3;
```



```

if(((a+b)>c) || (b+c>a) || (c+a>b))
    printf("Triangle is valid");
else
    printf("Triangle is not valid");
return 0;
}

```

(18)

```

#include<stdio.h>

int main()
{
    int month_number;

    printf("Enter month number\n");
    scanf("%d",&month_number);

    if((month_number
==1) || (month_number==3) || (month_number==5) || (month_number==7) || (month_number==8) || (month_number==10))
        printf("Month has 31 days\n");
    else if(month_number==2)
        printf("Month has 28\29 days\n");
    else
        printf("Month has 30 days");
    return 0;
}

```

