Question – 01: Program that will decide whether a number is positive or not.

```
#include<stdio.h>
int main(){
int n;
printf("Enter any value=");
scanf("%d",&n);

if(0<=n){
        printf("positive");
}
else{
        printf("Negative");
}
return 0;
}
```

Question – 02: Program that will decide whether a number is even or odd.

```
#include<stdio.h>
int main(){
int R;
printf("Enter a value=");
scanf("%d",&R);
if(R%2==0){
         printf("Even");
  }
  else{
        printf("Odd");
 }
return 0;
}
```

Question – 03: Program that will read from the console a random Positive nonzero number and determine if it is a power of 2.

```
#include<stdio.h>

int main(){

int n, r;

printf("Enter a value=");

scanf("%d",&n);


if((n&(n-1))==0){

        printf("It is a power of 2\n");

        }

else{

        printf("It is not a power of 2\n");

}

return 0;

}
```

Question – 04: program that will decide whether a year is leap year or not.

```
#include<stdio.h>
int main(){
int year;
printf("Enter the year=");
scanf("%d",&year);

if(year%400==0){
        printf("Leap year\n");
}
else if(year%4==0 && year%100!=0){
        printf("Leap year\n");
}
else{
        printf("Not Leap year\n");
}
return 0;
}
```

Question – 05: Write a program (WAP) that will print following series upto N'th terms.

```
#include<stdio.h>
int main(){
int n,i,r;

printf("Enter N terms=");
scanf("%d",&n);

for(i=1; i<=n; i++){
        r=(i%2!=0);
        printf("%d,",r);

}
return 0;
}
```

Question – 06: Grade sheet making program.

```
#include<stdio.h>

int main(){

        float marks,A,HW,CT,MT,TF;

printf("Enter the value of A, HW, CT, MT, and TF: ");

scanf("%f %f %f %f %f",&A,&HW,&CT,&MT,&TF);

marks=A+HW+CT+MT*0.6+TF*0.40;

if(marks>100 || marks<0){

        printf("Not a valid number\n");

}

else if(90<=marks){

        printf("Your letter Grade is A\n");

}

else if(86<=marks){

        printf("Your letter Grade is A-\n");

}

else if(82<=marks){

        printf("Your letter Grade is B+\n");

}
```

```
else if(78<=marks){
        printf("Your letter Grade is B\n");
}
else if(74<=marks){
        printf("Your letter Grade is B-\n");
}
else if(70<=marks){
        printf("Your letter Grade is C+\n");
}
else if(66<=marks){
        printf("Your letter Grade is C\n");
}
else if(62<=marks){
        printf("Your letter Grade is C-\n");
}
else if(58<=marks){
        printf("Your letter Grade is D+\n");
}
else if(55<=marks){
        printf("Your letter Grade is D\n");
}

else if(marks<=54){
        printf("Your letter Grade is F\n");
}

return 0;
}
```

Question – 07: Write a program (WAP) that will find (x to the power y) where x,y are positive integers.

```
#include<stdio.h>
int main(){
int x,y;
printf("Enter x and y=");
scanf("%d %d",&x,&y);

double result=pow(x,y);
printf("The x to the power y is=%.2lf\n",result);

return 0;
}
```

Question – 08: WAP that will find the GCD (greatest common divisor) and LCM (least common multiple) of two positive integers.

```
#include<stdio.h>
int main(){
int n1,n2,num1, num2,gcd,lcm,rem;
printf("Enter two number=");
scanf("%d %d", &num1,&num2);
n1=num1;
n2=num2;

while(n2!=0){
        rem=n1%n2;
        n1=n2;
        n2=rem;
}
gcd=n1;
lcm=(num1*num2)/gcd;

printf("GCD=%d\n",gcd);
printf("LCM=%d\n",lcm);

return 0;
}
```

Question – 09: WAP that will determine whether an integer is palindrome number or not.

```
#include<stdio.h>
int main(){
int num, temp, r, sum=0;
printf("Enter any number=");
scanf("%d",&num);
temp=num;
while(temp!=0){
        r=temp%10;
        sum=sum*10+r;
        temp=temp/10;
        }
if(sum==num){
        printf("Palindrome");
        }
else{
        printf(" Not Palindrome");
}
return 0;
}
```

Question – 10: Write a program (WAP) that will print Fibonacci series upto n'th terms.

```
#include<stdio.h>
int main(){
int first=0 ,second=1, count=1, fibo,n;
printf("Enter any number=");
scanf("%d",&n);

while(count<=n){
        if(count<=1){
fibo=count;
        }
        else{
                fibo=first+second;
                first=second;
                second=fibo;
        }
        printf("%d ",fibo);
        count++;
}
```

```
return 0;
}
```