

Top 50 C Programming Practical Questions

1. Write a C program to add two numbers.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    printf("%d",a+b);
    return 0;
}
```

2. Write a C program to subtract two numbers.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    printf("%d",a-b);
    return 0;
}
```

3. Write a C program to multiply two numbers.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    printf("%d",a*b);
    return 0;
}
```

4. Write a C program to divide two numbers.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    printf("%d",a/b);
    return 0;
}
```

5. Write a C program to check even or odd.

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

6. Write a C program to find largest of two numbers.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    if(a>b) printf("%d",a);
    else printf("%d",b);
    return 0;
}
```

7. Write a C program to find largest of three numbers.

```
#include <stdio.h>
int main() {
    int a,b,c;
    scanf("%d%d%d",&a,&b,&c);
    if(a>b && a>c) printf("%d",a);
    else if(b>c) printf("%d",b);
    else printf("%d",c);
    return 0;
}
```

8. Write a C program to find factorial using loop.

```
#include <stdio.h>
int main() {
    int n,f=1;
    scanf("%d",&n);
    for(int i=1;i<=n;i++) f*=i;
    printf("%d",f);
    return 0;
}
```

9. Write a C program to find factorial using recursion.

```
#include <stdio.h>
int fact(int n){
    if(n==0) return 1;
    return n*fact(n-1);
}
int main(){
    int n;
    scanf("%d",&n);
    printf("%d",fact(n));
    return 0;
}
```

10. Write a C program to check prime number.

```
#include <stdio.h>
int main() {
    int n,i,flag=1;
    scanf("%d",&n);
    if(n<=1) flag=0;
    for(i=2;i<=n/2;i++)
        if(n%i==0) flag=0;
    if(flag) printf("Prime");
    else printf("Not Prime");
    return 0;
}
```

11. Write a C program to reverse a number.

```
#include <stdio.h>
int main() {
    int n,rev=0;
    scanf("%d",&n);
    while(n!=0){
        rev=rev*10+n%10;
        n/=10;
    }
    printf("%d",rev);
    return 0;
}
```

12. Write a C program to check palindrome number.

```
#include <stdio.h>
int main() {
    int n,temp,rev=0;
    scanf("%d",&n);
    temp=n;
    while(n!=0){
```

```

        rev=rev*10+n%10;
        n/=10;
    }
    if(temp==rev) printf("Palindrome");
    else printf("Not Palindrome");
    return 0;
}

```

13. Write a C program to find sum of digits.

```

#include <stdio.h>
int main() {
    int n,sum=0;
    scanf("%d",&n);
    while(n!=0){
        sum+=n%10;
        n/=10;
    }
    printf("%d",sum);
    return 0;
}

```

14. Write a C program to generate Fibonacci series.

```

#include <stdio.h>
int main() {
    int n,a=0,b=1,c;
    scanf("%d",&n);
    printf("%d %d ",a,b);
    for(int i=3;i<=n;i++){
        c=a+b;
        printf("%d ",c);
        a=b;
        b=c;
    }
    return 0;
}

```

15. Write a C program using switch case calculator.

```
#include <stdio.h>
int main() {
    int a,b;
    char op;
    scanf(" %c",&op);
    scanf("%d%d",&a,&b);
    switch(op){
        case '+': printf("%d",a+b); break;
        case '-': printf("%d",a-b); break;
        case '*': printf("%d",a*b); break;
        case '/': printf("%d",a/b); break;
    }
    return 0;
}
```

16. Write a C program to read and print array elements.

```
#include <stdio.h>
int main() {
    int n,a[50];
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    for(int i=0;i<n;i++) printf("%d ",a[i]);
    return 0;
}
```

17. Write a C program to find largest element in array.

```
#include <stdio.h>
int main() {
    int n,a[50],max;
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    max=a[0];
```

```
    for(int i=1;i<n;i++)
        if(a[i]>max) max=a[i];
    printf("%d",max);
    return 0;
}
```

18. Write a C program to reverse an array.

```
#include <stdio.h>
int main() {
    int n,a[50];
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    for(int i=n-1;i>=0;i--) printf("%d ",a[i]);
    return 0;
}
```

19. Write a C program to sort array in ascending order.

```
#include <stdio.h>
int main() {
    int n,a[50],t;
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    for(int i=0;i<n;i++)
        for(int j=i+1;j<n;j++)
            if(a[i]>a[j]){
                t=a[i]; a[i]=a[j]; a[j]=t;
            }
    for(int i=0;i<n;i++) printf("%d ",a[i]);
    return 0;
}
```

20. Write a C program to find length of string.

```
#include <stdio.h>
int main() {
    char s[100];
    int i=0;
    scanf("%s",s);
    while(s[i]!='\0') i++;
    printf("%d",i);
    return 0;
}
```

21. Write a C program to reverse a string.

```
#include <stdio.h>
#include <string.h>
int main() {
    char s[100];
    scanf("%s",s);
    for(int i=strlen(s)-1;i>=0;i--)
        printf("%c",s[i]);
    return 0;
}
```

22. Write a C program to compare two strings.

```
#include <stdio.h>
#include <string.h>
int main() {
    char a[50],b[50];
    scanf("%s%s",a,b);
    if(strcmp(a,b)==0) printf("Equal");
    else printf("Not Equal");
    return 0;
}
```


23. Write a C program to copy one string to another.

```
#include <stdio.h>
#include <string.h>
int main() {
    char a[50],b[50];
    scanf("%s",a);
    strcpy(b,a);
    printf("%s",b);
    return 0;
}
```

24. Write a C program using function to add two numbers.

```
#include <stdio.h>
int add(int x,int y){ return x+y; }
int main(){
    int a,b;
    scanf("%d%d",&a,&b);
    printf("%d",add(a,b));
    return 0;
}
```

25. Write a C program to swap two numbers using function.

```
#include <stdio.h>
void swap(int *a,int *b){
    int t=*a;
    *a=*b;
    *b=t;
}
int main(){
    int x,y;
    scanf("%d%d",&x,&y);
    swap(&x,&y);
}
```

```
    printf("%d %d",x,y);  
    return 0;  
}
```

26. Write a C program using pointer to access variable.

```
#include <stdio.h>  
int main() {  
    int a=10;  
    int *p=&a;  
    printf("%d",*p);  
    return 0;  
}
```

27. Write a C program using structure to store student data.

```
#include <stdio.h>  
struct student{  
    int roll;  
    char name[50];  
};  
int main(){  
    struct student s;  
    scanf("%d%s",&s.roll,s.name);  
    printf("%d %s",s.roll,s.name);  
    return 0;  
}
```

28. Write a C program to read multiple students using structure.

```
#include <stdio.h>  
struct student{
```

```
    int roll;
    char name[50];
};
int main(){
    struct student s[2];
    for(int i=0;i<2;i++)
        scanf("%d%s",&s[i].roll,s[i].name);
    for(int i=0;i<2;i++)
        printf("%d %s\n",s[i].roll,s[i].name);
    return 0;
}
```

29. Write a C program to write data into a file.

```
#include <stdio.h>
int main(){
    FILE *fp;
    fp=fopen("data.txt","w");
    fprintf(fp,"Hello C");
    fclose(fp);
    return 0;
}
```

30. Write a C program to read data from a file.

```
#include <stdio.h>
int main(){
    FILE *fp;
    char ch;
    fp=fopen("data.txt","r");
    while((ch=fgetc(fp))!=EOF)
        printf("%c",ch);
    fclose(fp);
    return 0;
}
```

31. Write a C program to add two matrices.

```
#include <stdio.h>
int main() {
    int a[2][2], b[2][2], c[2][2];
    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            scanf("%d",&a[i][j]);

    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            scanf("%d",&b[i][j]);

    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            c[i][j]=a[i][j]+b[i][j];

    for(int i=0;i<2;i++){
        for(int j=0;j<2;j++)
            printf("%d ",c[i][j]);
        printf("\n");
    }
    return 0;
}
```

32. Write a C program to multiply two matrices.

```
#include <stdio.h>
int main() {
    int a[2][2], b[2][2], c[2][2]={0};
    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            scanf("%d",&a[i][j]);

    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            scanf("%d",&b[i][j]);
```

```
    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
            for(int k=0;k<2;k++)
                c[i][j]+=a[i][k]*b[k][j];

    for(int i=0;i<2;i++){
        for(int j=0;j<2;j++)
            printf("%d ",c[i][j]);
        printf("\n");
    }
    return 0;
}
```

33. Write a C program to find sum of array elements.

```
#include <stdio.h>
int main() {
    int n,a[50],sum=0;
    scanf("%d",&n);
    for(int i=0;i<n;i++){
        scanf("%d",&a[i]);
        sum+=a[i];
    }
    printf("%d",sum);
    return 0;
}
```

34. Write a C program to count even and odd numbers in array.

```
#include <stdio.h>
int main() {
```

```

int n,a[50],even=0,odd=0;
scanf("%d",&n);
for(int i=0;i<n;i++){
    scanf("%d",&a[i]);
    if(a[i]%2==0) even++;
    else odd++;
}
printf("Even=%d Odd=%d",even,odd);
return 0;
}

```

35. Write a C program to count vowels in a string.

```

#include <stdio.h>
int main() {
    char s[100];
    int c=0;
    scanf("%s",s);
    for(int i=0;s[i]!='\0';i++){
        if(s[i]=='a' || s[i]=='e' || s[i]=='i' || s[i]=='o' || s[i]=='u' ||
           s[i]=='A' || s[i]=='E' || s[i]=='I' || s[i]=='O' || s[i]=='U')
            c++;
    }
    printf("%d",c);
    return 0;
}

```

36. Write a C program to count digits in a number.

```

#include <stdio.h>
int main() {
    int n,count=0;
    scanf("%d",&n);
    while(n!=0){
        count++;
        n/=10;
    }
}

```

```
    }  
    printf("%d",count);  
    return 0;  
}
```

37. Write a C program to print ASCII value of a character.

```
#include <stdio.h>  
int main() {  
    char ch;  
    scanf("%c",&ch);  
    printf("%d",ch);  
    return 0;  
}
```

38. Write a C program to check Armstrong number.

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

39. Write a C program using do while loop.

```
#include <stdio.h>
int main() {
    int i=1;
    do{
        printf("%d ",i);
        i++;
    }while(i<=5);
    return 0;
}
```

40. Write a C program to print multiplication table of a number.

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d",&n);
    for(int i=1;i<=10;i++)
        printf("%d x %d = %d\n",n,i,n*i);
    return 0;
}
```

41. Write a C program to find smallest element in array.

```
#include <stdio.h>
int main() {
    int n,a[50],min;
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    min=a[0];
    for(int i=1;i<n;i++)
        if(a[i]<min) min=a[i];
    printf("%d",min);
    return 0;
}
```

42. Write a C program to search an element in array.

```
#include <stdio.h>
int main() {
    int n,a[50],key,found=0;
    scanf("%d",&n);
    for(int i=0;i<n;i++) scanf("%d",&a[i]);
    scanf("%d",&key);
    for(int i=0;i<n;i++)
        if(a[i]==key) found=1;
    if(found) printf("Found");
    else printf("Not Found");
    return 0;
}
```

43. Write a C program to check leap year.

```
#include <stdio.h>
int main() {
    int y;
    scanf("%d",&y);
    if((y%4==0 && y%100!=0) || y%400==0)
        printf("Leap Year");
    else
        printf("Not Leap Year");
    return 0;
}
```

44. Write a C program to find power of a number.

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

```
int main() {
    int b,p,res=1;
    scanf("%d%d",&b,&p);
    for(int i=1;i<=p;i++)
        res*=b;
    printf("%d",res);
    return 0;
}
```

45. Write a C program to print star pattern.

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d",&n);
    for(int i=1;i<=n;i++){
        for(int j=1;j<=i;j++)
            printf("*");
        printf("\n");
    }
    return 0;
}
```

46. Write a C program for menu driven arithmetic operations.

```
#include <stdio.h>
int main() {
    int ch,a,b;
    scanf("%d",&ch);
    scanf("%d%d",&a,&b);
    switch(ch){
        case 1: printf("%d",a+b); break;
        case 2: printf("%d",a-b); break;
        case 3: printf("%d",a*b); break;
```

```
        case 4: printf("%d",a/b); break;
    }
    return 0;
}
```

47. Write a C program to swap two numbers without using third variable.

```
#include <stdio.h>
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("%d %d",a,b);
    return 0;
}
```

48. Write a C program to check positive or negative number.

```
#include <stdio.h>
int main() {
    int n;
    scanf("%d",&n);
    if(n>=0) printf("Positive");
    else printf("Negative");
    return 0;
}
```

49. Write a C program to find GCD of two numbers.

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

```
int main() {
    int a,b;
    scanf("%d%d",&a,&b);
    while(a!=b){
        if(a>b) a=a-b;
        else b=b-a;
    }
    printf("%d",a);
    return 0;
}
```

50. Write a C program to find LCM of two numbers.

```
#include <stdio.h>
int main() {
    int a,b,max;
    scanf("%d%d",&a,&b);
    max=(a>b)?a:b;
    while(1){
        if(max%a==0 && max%b==0){
            printf("%d",max);
            break;
        }
        max++;
    }
    return 0;
}
```