1) **Reversing a 32 bit signed integers**

```
#include<stdio.h>
int main()
{
   int n,r,rev=0;
   printf("enter a number:");
   scanf("%d",&n);
   while(n!=0)
   {
      r=n%10;
      rev=rev*10+r;
      n=n/10;
   }
   printf("reversing a 32 bit number is:%d\n",rev);
   return 0;
}
```

OUT PUT:

```
/tmp/qZ0BrPcprC.o
enter a number:021
reversing a 32 bit number is:12


=== Code Execution Successful ===
```

2) **Check for a valid String**

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

```
int main()
{
   char str[100];
   int valid=1;
   printf("enter a string:");
   scanf("%s",&str);
   for(int i=0;str[i]!='\0';i++)
   {
      if(!(str[i]>='a' && str[i]<='z') || (str[i]>='A'&&str[i]<='Z'))
      {
         valid=0;
         break;
      }
   }
   if(valid)
   {
      printf("valid string");
   }
   else
   {
      printf("not valid string");
   }
   return 0;
}
```

OUT PUT:

```
/tmp/sfPWt11dm0.o
enter a string:ramana
valid string

=== Code Execution Successful ===
```

3) Merging two Arrays

```
#include<stdio.h>
int main()
{
   int a[5]={1,2,3,4,5};
   int b[5]={6,7,8,9,10};
   int c[10];
   for(int i=0;i<5;i++)
   {
      c[i]=a[i];
   }
   for(int i=0;i<5;i++)
   {
      c[i+5]=b[i];
   }
   printf("merged array:");
   for(int i=0;i<10;i++)
   {
      printf("%d ",c[i]);
   }
   return 0;
}
```

OUT PUT:

```
/tmp/l4ZxMdU77c.o
merged array:1 2 3 4 5 6 7 8 9 10

=== Code Execution Successful ===
```

4) **Given an array finding duplication values**

```
#include<stdio.h>
int main()
{
   int a[6]={1,2,1,3,2,4};
   printf("duplicates are:");
   for(int i=0;i<6;i++)
   {
      for(int j=i+1;j<6;j++)
      {
         if(a[i]==a[j])
         {
            printf("%d ",a[j]);
         }
      }
   }
   return 0;
}
```

OUT PUT:

```
/tmp/cS7FEcoY6e.o
duplicates are:1 2

=== Code Execution Successful ===
```

6) Given array of reg nos need to search for particular reg no

```
#include <stdio.h>
int main()
{
   int regno[5] = {101, 102, 103, 104, 105};
   int n, i;
   printf("Enter a number: ");
   scanf("%d", &n);
   for (i = 0; i < 5; i++)
   {
      if (regno[i] == n)
      {
         printf("Reg no %d is found\n", n);
         return 0;
      }
      else
      {
         printf("Reg no %d is not found\n", n);
         return 0;
      }
   }
   return 0;
```

}

OUT PUT:

```
/tmp/fJrrr8r65w.o
Enter a number: 101
Reg no 101 is found


=== Code Execution Successful ===
```

5) Merging of list

```
#include<stdio.h>
int main()
{
   int a[5]={1,2,3,4,5};
   int b[5]={6,7,8,9,10};
   int c[10];
   for(int i=0;i<5;i++)
   {
      c[i]=a[i];
   }
   for(int i=0;i<5;i++)
   {
      c[i+5]=b[i];
   }
```

```
    printf("merged list:");
    for(int i=0;i<10;i++)
    {
        printf("%d ",c[i]);
    }
    return 0;
}
```

OUT PUT:

```
/tmp/BPwanaJnRp.o
merged list:1 2 3 4 5 6 7 8 9 10

=== Code Execution Successful ===
```

7) **Identify location of element in given array**

```
#include<stdio.h>
int main()
{
    int a[5]={10,20,30,40,50};
    int target=20;
    int index=-1;
    for(int i=0;i<5;i++)
    {
        if(a[i]==target)
        {
            index=i;
        }
    }
```

```
    if(index!=-1)
    {
        printf("element %d is found at index %d\n",target,index);
    }
    else
    {
        printf("element %d is not found",target,index);
    }
    return 0;
}
```

OUT PUT:

```
/tmp/GaIDOLyQyv.o
element 20 is found at index 1


=== Code Execution Successful ===
```

8) Given array print odd and even values

```
#include<stdio.h>
int main()
{
    int a[10]={1,2,3,4,5,6,7,8,9,10};
    printf("even numbers is:\n");
    for(int i=0;i<10;i++)
    {
```

```
        if(a[i]%2==0)
        {
            printf("%d \n",a[i]);
        }
    }
    printf("odd numbers is:\n");
    for(int i=0;i<10;i++)
    {
        if(a[i]%2!=0)
        {
            printf("%d \n",a[i]);
        }
    }
    return 0;
}
```

OUT PUT:

```
/tmp/IatOMP4xer.o
even numbers is:
2
4
6
8
10
odd numbers is:
1
3
5
7
9


=== Code Execution Successful ===
```

9) Sum of Fibonacci Series

```
#include<stdio.h>
int main()
{
   int n,f1=0,f2=1,f3;
   int sum=1;
   printf("enter n value:\n");
   scanf("%d",&n);
   for(int i=2;i<n;i++)
   {
```

```
        f3=f1+f2;
        f1=f2;
        f2=f3;
        sum=sum+f3;
    }
    printf("sum of fibinocci is:%d\n",sum);
    return 0;
}
```

OUT PUT:

```
/tmp/LjrNOvIWrJ.o
enter n value:
10
sum of fibinocci is:88


=== Code Execution Successful ===
```

10) Finding factorial of a number

```
#include<stdio.h>
int main()
{
    int n,fact=1;
    printf("enter a number:");
    scanf("%d",&n);
    for(int i=1;i<=n;i++)
    {
```

```
        fact=fact*i;
    }
    printf("factorial is:%d",fact);
    return 0;
}
```

OUT PUT:

```
/tmp/JuCl9YqMmG.o
enter a number:5
factorial is:120

=== Code Execution Successful ===
```