Answer to the question number 1

```c
#include <stdio.h>
int main()
{
    int a=5, b=13;
    int c;
    c=a;
    a=b;
    b=c;

        printf("%d and %d",a,b);

    return 0;
}
```

Answer to the question number 2

```c
#include<stdio.h>
int main()
{
    int a,b,c,d;
    scanf("%d%d%d%d",&a,&b,&c,&d);

    if(a>b && b>c && c>d)
    {
        printf("Largest = %d\n",a);
        if(b<c && b<d)
        {
            printf("Smallest = %d\n",b);
        }
        else if(c<b&&c<d)
        {
            printf("Smallest = %d\n",c);
        }
        else
        {
            printf ("Smallest = %d\n",d);
        }
    }
    if(b>a&&b>c && b>d)
    {
        printf("Largest = %d\n",b);
        if(a<c && a<d)
        {
            printf("Smallest = %d\n",a);
        }
        else if(c<a && c<d)
        {
            printf("Smallest = %d\n",c);
        }
    else if(a==b && b==c && c==d)
    {
        printf("They are equal");
    }
        else
```

```c
        {
            printf ("Smallest = %d\n",d);
        }
    }
    else if(c>a && c>b&&c>d)
    {
        printf("Largest = %d\n",c);
        if(b<a&&b<d)
        {
            printf("Smallest = %d\n",b);
        }
        else if(b>a&&a<d)
        {
            printf("Smallest = %d\n",a);
        }
        else
        {
            printf ("Smallest = %d\n",d);
        }
    }
    else
    {
        printf("Largest = %d\n",d);
        if(a<b&&a<c)
        {
            printf("Smallest = %d\n",a);
        }
        else if(c<b&&c<d)
        {
            printf("Smallest = %d\n",c);
        }
        else
        {
            printf ("Smallest = %d\n",b);
        }
    }
    return 0;
}
```

Answer to the question number 3

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

int main()
{
    long long int a;
    int i;
    scanf("%lld",&a);

    for(i=1;i>=1;)
    {
        if(a/(pow(10,i))>=1)
        {
            i++;
        }
        else
        {
            printf("%d digits",i);
            break;
        }
    }
    return 0;
}
```

Answer to the question number 4

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

int main()

{
   long long int a;
   scanf("%lld",&a);

   int i,b,sum=0;

   for(i=0;i>=0;i++)
   {
      if(a/(pow(10,i))>=1)
      {
         b=pow(10,i);
         sum=sum+(a/b)%10;
      }
      else
      {
         printf("%d",sum);
         break;
      }
   }
   return 0;
}
```

Answer to the question number 5

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

{
    int a;
    scanf("%d",&a);

    int i;
    printf("%d ",a);

    for(i=1;i>=1;i++)
    {
        if(a==1)
        {
            break;
        }
        else if(a%2==0)
        {
            a=a/2;
        }
        else
        {
            a=a-1;
        }
        printf("%d ",a);
    }
    return 0;
}
```

Answer to the question number 6

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

{
    int a,b;
    printf("Enter the first Number:");
    scanf("%d",&a);
    printf("Enter the second number:");
    scanf("%d",&b);

    if(a%b==0)
    {
        printf("\nThe first number is divisible by the second number.");
    }
    else if(b%a==0)
    {
        printf("\nThe second number is divisible by the first number.");
    }
    else
    {
        printf("\nNone of them divisible by the other.");
    }
    return 0;
}
```

Answer to the question number 7

```c
#include <stdio.h>
int main()
{
    int a,b,c,d,e,i;
    scanf("%d%d",&a,&b);
    d=a;
    e=b;
    if(a>b)
    {
        for(i=1;i>=1;i++)
        {
            if(b!=0)
            {
                c=a%b;
                a=b;
                b=c;
            }
            else
            {
                break;
            }
        }
        printf("The GCD of %d and %d is %d",d,e,a);
    }
    else if(a<b)
    {
        for(i=1;i>=1;i++)
        {
            if(a!=0)
            {
                c=b%a;
                b=a;
                a=c;
            }
            else
            {
                break;
            }
        }
        printf("The GCD of %d and %d is %d",d,e,b);
    }
    return 0;
```

Answer to the question number 8

```c
#include <stdio.h>
int main()
{
    int a,b,c,d,e,i;
    scanf("%d%d",&a,&b);
    d=a;
    e=b;
    if(a>b)
    {
        for(i=1;i>=1;i++)
        {
            if(b!=0)
            {
                c=a%b;
                a=b;
                b=c;
            }
            else
            {
                break;
            }
        }
        printf("The LCM of %d and %d is %d",d,e,(d*e)/a);
    }
    else if(a<b)
    {
        for(i=1;i>=1;i++)
        {
            if(a!=0)
            {
                c=b%a;
                b=a;
                a=c;
            }
            else
            {
                break;
            }
        }
        printf("The LCM of %d and %d is %d",d,e,(d*e)/b);
    }
    return 0;
}
```

Answer to the question number 9

```c
#include <stdio.h>

int main()
{
   int a,i;

   scanf("%d",&a);
   printf("The factors of %d are: ",a);

   for(i=1;i<=a;i++)
   {
     if(a%i==0)
     {
       printf("%d ",i);
     }
   }
   return 0;
}
```

Answer to the question number 10

```c
#include <stdio.h>
int main()
{
   int a,i,f;
   scanf("%d",&a);
   if(a==2)
   {
     printf("Prime");
   }
   f=0;
   for(i=2;i<=(a-1);i++)
   {
     if(a%i==0)
     {
       f=1;
       printf("Composite");
       break;
     }
   }
   if(f==0)
   {
```

```c
        printf("Prime");
    }
    return 0;
}
```