1.factorial number

```c
#include <stdio.h>
int main()
{
  int n,i;
  printf("enter the integer:");
  scanf("%d",&n);
  if (n<0)
    printf("error!factorial of a negative number doesn't exist");
  else{
    for (i=1;i <=n; ++1)
      {
        fact += 1;
      }
    printf("factorial of %d = %llu",n,fact);
    return 0;
      }
}
```

2.

8. Palindrome

```c
#include <stdio.h>

int main(){
  int n, reversed = 0, remainder, original;
  printf("enter an integer: ");
  scanf("%d" , &n);
  original = n;
  while(n != 0){
    remainder = n % 10;
    reversed = reversed * 10 + remainder;
```

```c
    n /= 10;
  }
  if(original == reversed)
    printf("%d is a palindrome.", original);
  else
    printf("%d is not a palindrome.", original);
  return 0;
}
```

3. Sum of the digits

```c
#include <stdio.h>
int main()
{
  int n,sum=0;
  printf("enter the number");
  scanf("%d",&n);
  while(n!=0)
  {
    sum=sum+(n%10);
    n= n/10;
  }
  printf("sum of digits is %d",sum);
}
```

4. Prime numbers

```c
#include <stdio.h>
int main()
{
  int i, num, n, count;
  printf("enter the range: ");
  scanf("%d", &n);
```

```c
  printf("the prime numbers in between the range 1 to %d:",n);
  for(num = 1;num<=n;num++)
   {
     count = 0;
     for(i=2;i<=num/2;i++)
       {
         if(num%i==0)
         {
           count++;
           break;
         }
       }
     if(count==0 && num!= 1)
       printf("%d ",num);
   }
}
```

5. Armstrong number

```c
#include <stdio.h>
int main()
{
  int num,originalNum, remainder, result = 0;
  printf("enter a three digit integer; ");
  scanf("%d",&num);
  original Num = num;
  while (originalNum != 0){
   remainder = originalNum % 10;
    result += remainder * remainder * remainder;
    originalNum /= 10;
  }
  if (result == num)
    printf("%d is an armstrong number",num);
```

```c
    else
        printf("%d is not an armstrong number",num);
    return 0;
}
```

6.
```c
int main()
{
    int a,b,c;
    printf("enter the value of a and b");
    scanf( "%d%d" ,&a,&b);
    c=a+b;
     printf("the sum of a and b is %d",c);
    return 0;
}
```

7. Prime number or Not
```c
 #include<stdio.h>
int main()
{
    int n, i, flag = 0;
    printf("enter a positive integer; ");
    scanf(" %d", &n);
    if (n == 0 || n == 1)
        flag = 1;
    for (i = 2; i <= n / 2; ++i)
      {
        if (n % i == 0)
        {
            flag = 1;
            break;
```

```c
        }
      }
    if (flag == 0)
        printf(" %d is a prime number.", n);
    else
        printf(" %d is not a prime number.", n);
}
```

8. Palindrome

```c
 #include <stdio.h>

int main(){
  int n, reversed = 0, remainder, original;
  printf("enter an integer: ");
  scanf("%d" , &n);
  original = n;
  while(n != 0){
    remainder = n % 10;
    reversed = reversed * 10 + remainder;
    n /= 10;
  }
  if(original == reversed)
    printf("%d is a palindrome.", original);
  else
    printf("%d is not a palindrome.", original);
  return 0;
}
```

9.
```c
#include<stdio.h>
int main()
```

```c
{
  int n, temp, rem, result=0;
  printf("enter a number");
  scanf("%d",&n);
  temp=n;
  while(temp!=0)
   {
     rem=temp%10;
     result+=rem*rem*rem;
     temp/=10;
   }
  if(result==n)
    printf("%d is an armstrong number",n);
  else
    printf("%d is not an armstrong number",n);
  return 0;

}
```