PROGRAM: 1 (ADAM NUMBER)

```
#include<stdio.h>
int main()
{
   printf("enter the number:");
   int n,i,rem,r,a,b,rem2,r2;
   scanf("%d",&n);
   a=n*n;
   printf("square value 1: %d \n",a);

   while(n>0)
   {

      rem=n%10;

      r=r*10+rem;
      n=n/10;
   }
   printf("\nthe reversed number:%d",r);
   b=r*r;
   printf("\nthe square value 2 is : %d\n",b);
    while(b>0)
   {

      rem2=b%10;

      r2=r2*10+rem2;
      b=b/10;
   }
   printf("the reversed number 2 : %d",r2);
   if(a==r2)
   {
      printf("\n It is a Adam Number");

   }
   else{
      printf("\n It is not an Adam Number");
   }

   return 0;
}
```

OUTPUT 1:

```
enter the number:91
square value 1: 8281
the reversed number:19
the square value 2 is: 361
the reversed number 2: 163
```

it is not an Adam Number

OUTPUT 2:

```
enter the number:12
square value 1: 144
the reversed number:21
the square value 2 is: 441
the reversed number 2: 144
It is an Adam Number
```

PROBLEM 2(STRONG NUMBER)

```
#include<stdio.h>
int main()
{
   printf("enter the number:");
   int n,fact,rem,i,sum=0,temp;
   scanf("%d",&n);
   temp=n;
   while(n>0)
   {
      rem=n%10;
      fact=1;
      for(i=rem;i>=2;--i)
      {

         fact=fact*i;
      }
      sum=sum+fact;
      n=n/10;
   }
   printf("%d",sum);
   if(sum==temp)
   {
      printf("it is a strong number");
   }
   else
   {
      printf("not a strong number");
   }

   return 0;
}
```

OUTPUT:

```
enter the number:145
145
it is a strong number
```

PROBLEM 3(AMSTRONG NUMBER)

```
#include<stdio.h>
#include<math.h>
int main(int argc, char const *argv[])
{
	int n,count=0,rem,sum=0;
	printf("enter the number");
	scanf("%d",&n);
	int temp =n;
	while(n>0)
	{
		n=n/10;
		++count;
	}
	n=temp;
	while(n>0)
	{
		rem=n%10;
		sum=sum+pow(rem,count);
		n=n/10;
	}
	if(sum==temp)
	{
		printf("it is a amstrong number");
	}
	else
```

```
	{
		printf("it is not a amstrong number");
	}
	return 0;
}

#include<stdio.h>
#include<math.h>
int main(int argc, char const *argv[])
{
	int n,count=0,rem,sum=0;
	printf("enter the number");
	scanf("%d",&n);
	int temp =n;
	while(n>0)
	{
		n=n/10;
		++count;
	}
	n=temp;
	while(n>0)
	{
		rem=n%10;
		sum=sum+pow(rem,count);
		n=n/10;
	}
	if(sum==temp)
	{
		printf("it is a amstrong number");
	}
	else
```

```
        {
                printf("it is not a amstrong number");
        }
        return 0;
}
```

OUTPUT:

enter the number153

it is a amstrong number