**Number**

* **Adam number**

#include<stdio.h>

void main ()

{

int n,rn=0,sqn,r,R,sqrn,rsqnn=0,x,y;

for (n=0;n<=1000;n++)

{

sqn=n\*n;

x=n;

while (x!=0)

{

r=x%10;

rn=(rn\*10)+r;

x=x/10;

}

sqrn=rn\*rn;

y=sqrn;

while (y!=0)

{

R=y%10;

rsqnn=(rsqnn\*10)+R;

y=y/10;

}

if(sqn==rsqnn)

{

printf("%d\t",n);

}

rn=0;

rsqnn=0;

}

}

* **Armstrong number**

#include<stdio.h>

#include<math.h>

int main ()

{

int n;

printf("Armstrong number is:\n");

for (n=1;n<=2000;n++)

{

int d=0,r,i;

double nn=0;

for (i=n;i!=0;i/=10)

{

d++;

}

for (i=n;i!=0;i/=10)

{

r=i%10;

nn+=pow(r,d);

}

if ((int)nn==n)

{

printf("%d ",n);

}

}

printf("\n");

return 0;

}

* **Automorphic**

#include<stdio.h>

int main()

{

int n,s,x,a=1;

printf("Enter a number:\n");

scanf("%d",&n);

s=n\*n;

x=n;

while (x>0)

{

if (x%10!=s%10)

{

a=0;

break;

}

x/=10;

s/=10;

}

if (a)

{

printf("%d is an automorphic number.\n",n);

}

else

{

printf("%d is not an automorphic number.\n",n);

}

return 0;

}

* **Duck number**

#include<stdio.h>

int main()

{

int n,d=0;

printf("Enter a number:\n");

scanf("%d",&n);

while (n>0)

{

if (n%10==0)

{

d=1;

break;

}

n/=10;

}

if (d)

{

printf("The number is a duck number.\n");

}

else

{

printf("The number is not a duck number.\n");

}

return 0;

}

* **Fibonacci**

#include <stdio.h>

int main()

{

int n,i;

long long int f1=0,f2=1,f3;

printf("Enter the number:\n");

scanf("%d",&n);

printf("Fibonacci Series: ");

for (i=0;i<n;i++)

{

if(i<=1)

{

f3=i;

}

else

{

f3=f1+f2;

f1=f2;

f2=f3;

}

printf("%lld\t",f3);

}

printf("\n");

return 0;

}

* Magic number

#include <stdio.h>

int main()

{

int n,sum=0;

printf("Enter a number:\n");

scanf("%d",&n);

while (n>9)

{

while (n>0)

{

sum += n % 10;

n /= 10;

}

n = sum;

sum = 0;

}

if (n==1)

{

printf("%d is a magic number.\n",n);

}

else

{

printf("%d is not a magic number.\n",n);

}

return 0;

}

* **Palindrome number**

#include<stdio.h>

void main ()

{

int x,p,rev,a;

printf("Enter number:\n");

scanf("%d",&x);

a=x;

while (x!=0)

{

p=x%10;

rev=rev\*10+p;

x/=10;

}

if(a==rev)

{

printf("%d is a Palindrome number.\n",a);

}

else

{

printf("%d is Not a Palindrome number.\n",a);

}

}

* **Sunny number**

#include<stdio.h>

#include<math.h>

void main ()

{

int n;

double root;

for (n=1;n<=1000;n++)

{

root=sqrt(n+1);

if((int)root==root)

{

printf("%d\t",n);

}

}

root=0;

}

* **Prime sum**

#include<stdio.h>

int main()

{

int n,i,f,sum=0;

for (n=2;n<=100;n++)

{

f=0;

for (i=2;i<=n/2;i++)

{

if(n%i==0)

{

f++;

break;

}

}

if(f==0)

{

printf("%d\t",n);

sum+=n;

}

}

printf("\nSum of Prime numbers are: %d",sum);

return 0;

}