**1. Program on prime number or not:**

#include <stdio.h>

int main()

{

int n,i,c=0;

printf("enter a number");

scanf("%d",&n);

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

{

if(n%i==0)

c++;

}

if(c==2)

printf("prime number");

else

printf("not prime");

}

**OUTPUT:**

**24**

**not a prime**

**3**

**prime number**

**2. Prime range:**

#include <stdio.h>

void main()

{

int n,i,c,range;

scanf("%d",&range);

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

{

c=0;

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

{

if(n%i==0)

c++;

}

if(c==0)

printf(" %d ",n);

}

}

**OUTPUT:**

**20**

**2 3 5 7 11 13 17 19**

**3.SUM OF PRIME NUMBERS IN GIVEN RANGE:**

#include <stdio.h>

int

main ()

{

int n, i, c, range,s=0;

printf ("enter a number");

scanf ("%d", &range);

for (n = 501; n <= range; n++)

{

c = 0;

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

{

if (n % i == 0)

c++;

}

if (c == 0)

{

s=s+n;

printf ("%d ", n);

}

}

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

}

**OUTPUT:**

**enter a number1000**

**503 509 521 523 541 547 557 563 569 571 577 587 593 599 601 607 613 617 619 631 641 643 647 653 659 661 673 677 683 691 701 709 719 727 733 739 743 751 757 761 769 773 787 797 809 811 821 823 827 829 839 853 857 859 863 877 881 883 887 907 911 919 929 937 941 947 953 967 971 977 983 991 997**

**54591**

**4.PROGRAM ON NTH PRIME NUMBER:**

#include <stdio.h>

int main ()

{

int n, i, c, range,s=0,count=0,k;

printf ("enter a number");

scanf ("%d", &k);

for (n = 2; count < k; n++)

{

c = 0;

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

{

if (n % i == 0)

c++;

}

if (c == 0)

{

count++;

}

}

printf("%d=%d\t",count,n-1);

}

**Output:**

**enter a number15**

**15=47**

**5.Nth Fibonacci series and number of digits:**

#include <stdio.h>

void main ()

{

int n,f1=0,f2=1,f3,i,c;

scanf("%d",&n);

if(n==1)

c=printf("%d",f1);

else

{

for(i=3;i<=n;i++)

{

f3=f1+f2;

f1=f2;

f2=f3;

}

c=printf("%d",f2);

}

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

}

**OUTPUT:**

**15**

**377**

**3**

**6.Program on symbols:**

**A)**

#include <stdio.h>

void main ()

{

int i,j;

for(i=1;i<=5;i++)

{

for(j=1;j<=i;j++)

{

printf("%d",i);

if(j<i)

printf("\*");

}

printf("\n");

}

for(i=4;i>=1;i--)

{

for(j=1;j<=i;j++)

{

printf("%d",i);

if(j<i)

printf("\*");

}

printf("\n");

}

}

**OUTPUT:**

**1**

**2\*2**

**3\*3\*3**

**4\*4\*4\*4**

**5\*5\*5\*5\*5**

**4\*4\*4\*4**

**3\*3\*3**

**2\*2**

**1**

**B)**

#include <stdio.h>

int

main ()

{

int j,n=0,i;

for (i = 1; i <= 5; i++)

{

for(j=1;j<=i;j++)

{

printf("%d ",j);

}

printf("\n");

}

}

**OUTPUT:**

**1**

**1 2**

**1 2 3**

**1 2 3 4**

**1 2 3 4 5**

**C)**

#include <stdio.h>

int

main ()

{

int j,n=0,i;

for (i = 1; i <= 5; i++)

{

for(j=1;j<=i;j++)

{

printf("%d ",i);

}

printf("\n");

}

}

**OUTPUT:**

**1**

**2 2**

**3 3 3**

**4 4 4 4**

**5 5 5 5 5**

**D)**

#include <stdio.h>

int main ()

{

int j,n=0,i;

for (i = 1; i <= 4; i++)

{

for(j=1;j<=i;j++)

{

n=n+1;

printf("%d ",n);

}

printf("\n");

}

}

**OUTPUT:**

**1**

**2 3**

**4 5 6**

**7 8 9 10**

**E)**

#include <stdio.h>

int main ()

{

int j,n=0,i;

for (i = 1; i <= 5; i++)

{

for(j=1;j<=i;j++)

{

printf("\*");

}

printf("\n");

}

}

**OUTPUT:**

**\***

**\*\***

**\*\*\***

**\*\*\*\***

**\*\*\*\*\***