NAME SUMIT GUPTA
ASSIGNMENT 7

```c
//1. Write a program to find the Nth term of the Fibonnaci series.
#include<stdio.h>
int main ()
{
    int a=-1,b=1,c,i,n;
    printf("Enter a number\n");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        c=a+b;
        a=b;
        b=c;
    }
    printf("the Nth term of the Fibonnaci series is %d",c);
    return 0;
}
```

```c
//2. Write a program to print first N terms of Fibonacci series
#include<stdio.h>
int main ()
{
    int a=-1,b=1,c,i,n;
    printf("Enter a number \n");
    scanf("%d",&n);

    for(i=0;i<=n;i++)
    {
        c=a+b;
        a=b;
        b=c;
     printf(" %d\n",c);
    }
    printf("\n");

}
```

```c
/*3. Write a program to check whether a given number is there in the Fibonacci
series or not.*/
#include<stdio.h>
int main ()
{
    int a=-1,b=1,c,n;
    printf("Enter a number");
    scanf("%d",&n);
    if(n==a || n==b)
    {
        printf("fibonacci series ");

    }
    else
     {
          c=a+b;
          while (c<n)
          {
            a=b;
            b=c;
            c=a+b;
          }
          if(c==n)
          {
             printf("fibonacci series ");
          }
          else
        {
             printf("not fibonacci series ");
        }

    }
```

```
    return 0;

}
```

```
//4. Write a program to calculate HCF of two numbers
#include<stdio.h>
int main ()
{
    int a,b,H;
    printf("Enter the two number is ");
    scanf("%d%d",&a,&b);
    for(H=a>b?a:b;H>=1;H--)

        if(a%H==0 && b%H==0)
        break;
        printf("the HCF  of two number is %d",H);
        return 0;
 }
```

```
//5. Write a program to check whether two given numbers are co-prime numbers or not

#include<stdio.h>
int main ()
{
int a,b,i,min;
printf("Enter a two number ");
scanf("%d%d",&a,&b);
min=a>b?a:b;
for(i=2;i<=min;i++)
if(a%i==0 && b%i==0)
break;
if(i==min+1)
{
    printf("%d and %d number is co-prime",a,b);
```

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}
else
{
    printf("%d and %d number is not co-prime",a,b);
```

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}
return 0;
}
```

```
// prime number
#include<stdio.h>
int main ()
{
    int i,x=2,N=100;
  //  printf("Enter a number\n");
   // scanf("%d",&N);
    while (N)
    {
        for(i=2;i<x;i++)

            if(x%i==0)
            break;
            if(i==x)
            {
                printf("%d\n",x);
            N --;
            }

         x++;
    }
    return 0;
}
```

```
//7. Write a program to print all Prime numbers between two given numbers
#include<stdio.h>
```

```c
int main (){
    int l,u,x,i;
    printf("Enter a lower and upper number\n");
    scanf("%d%d",&l,&u);
    for(x=l-1;x<=u-1;x++)
    {
        for(i=2;i<x;i++)

            if(x%i==0)
            break;

        if(i==x)
        printf("%d\n",x);

    }
    printf("\n");
    return 0;
}
```

```c
10
#include<stdio.h>
int main ()
{
    int n,r,s,x;
    printf("armstrong number\n");

    for(n=1;n<=1000;n++)
    {
        s=0;
        x=n;
        while(x!=0)
        {
            r=x%10;
            s=s+r*r*r;
            x=x/10;

        }
        if(s==n)
        printf("%d\n",n);
    }
return 0;

}
```

```c
/*9. Write a program to check whether a given number is an Armstrong number
or not*/
#include<stdio.h>
int main ()
{
    int n,x,r,s,i;
    printf("Enter a number");
    scanf("%d",&n);
    //for(i=1;i<=n;i++)

        s=0 ;
        x=n;
        while (x!=0)

        {
            r=x%10;
            s=s+r*r*r;
            x=x/10;
        }
        if(s==n)
        {
            printf("the given number is armstrong number %d",s);
        }
        else
        printf("not armstrong number");
```

```
return 0;
}
```