Assignment – 7

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Q1. Write a program to print first N terms of the Fibonnaci series.

Ans :- #include <stdio.h>

int main()

{

  int i, a = 0 , b = 1, c, num;

  printf("Enter a Number :-");

  scanf("%d",&num);

printf("1 ");

  for(i=1;i<=num;i++){

  c = a + b ;

  printf("%d ",c);

  a = b ;

  b = c ;

  }

}

Q2. Write a program to find the Nth term of the Fibonnaci series.

Ans :- #include <stdio.h>

int main()

{

  int i, a = 0 , b = 1, c, num;

  printf("Enter a Number :-");

  scanf("%d",&num);

  for(i=1;i<=num;i++){

  c = a + b ;

  a = b ;

  b = c ;

  }

  printf("%d ",c);

}

Q3. Write a program to check whether a given number is there in the Fibonacci

series or not ?

Ans :-  #include<stdio.h>

 int main()

  { int n ;

    int a = 0;

    int b = 1;

    printf("Enter a Number");

    scanf("%d",&n);

    if (n==a || n==b)

    printf("Yes");

    int c = a+b;

    while(c<=n)

    {

      if(c == n)

      printf("Yes");

      a = b;

      b = c;

      c = a + b;

    }

}

Q4. Write a program to calculate HCF of two number ?

Ans :- #include<stdio.h>

int main()

{ int a , b , i ;

  printf("Enter Two Numbers");

  scanf("%d %d",&a,&b);

  for(i=a<b?a:b;i>1;i--){

   if(a%i==0&&b%i==0)

   break;

  }

   printf("HCF is %d",i);

}

Q5. Write a program to check whether two given numbers are co-prime

numbers or not

Ans:- #include<stdio.h>

int main()

{ int a , b , i , min ;

  printf("Enter Two Numbers :-\n");

   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("CO-PRIME");

   else

     printf("NOT CO-PRIME");

}

Q6. Write a program to print all Prime numbers under 100

Ans :- #include<stdio.h>

int main()

{ int i , n , flag = 0 ;

  printf("Prime Numbers Under 100 :-\n");

  for(n=1;n<=100;n++){

    flag = 0 ;

   for(i=2;i<=n/2;n++){

    if(n%i==0)

    flag = 1 ;

    break;}

     if(flag==0)

        printf("%d ",n);

   }

 }

Q7. Write a program to print all Prime numbers between two given numbers

Ans :- #include<stdio.h>

int main()

{ int a, b , i , n , flag = 0 ;

  printf("Enter Two Numbers :-\n");

  scanf("%d %d",&a,&b);

  for(n=a+1;n<=b-1;n++){

    flag = 0 ;

   for(i=2;i<=n-1;i++){

    if(n%i==0)

    flag = 1;}

     if(flag==0)

        printf("%d ",n);

   }

 }

Q8.

Ans :- #include<stdio.h>

int main()

{ int a, i , n , flag = 0 ;

  printf("Enter a Numbers :-\n");

  scanf("%d",&a);

  for(n=a+1; ;n++){

    flag = 0 ;

   for(i=2;i<=n-1;i++){

    if(n%i==0)

    flag = 1;}

     if(flag==0){

        printf("%d ",n);

        break;}

   }

 }

Q9. Write a program to check whether a given number is an Armstrong number

or not ?

Ans :- #include<stdio.h>

int main()

{ int i, r, num, z = 0 , temp ;

  printf("Enter a Number :-\n");

   scanf("%d",&num);

   temp = num ;

   while(num!=0) {

   r = num % 10 ;

   z = z + r \* r \* r ;

   num = num / 10 ;

   }

   if(z==temp)

   printf("%d is Armstrong Number",z);

   else

   printf("Not an Armstrong Number");

}

Q10.

Ans :- #include<stdio.h>

int main()

{ int i, r, z , temp ;

  printf("Armstrong Number Under 100\n");

   for(i=1;i<=100;i++)

   {

   temp = i ;

   while(i!=0){

   r = i % 10 ;

   z = z + r \* r \* r ;

   i = i / 10 ;

   if(z==temp)

   printf("%d ",temp); }