Q1.Write a program to find the Nth term of the Fibonnaci series.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, a = 0, b = 1, c;

printf("Enter number = ");

scanf("%d", &num);

for (int i = 2; i < num; ++i)

{

c = a + b;

a = b;

b = c;

}

printf("%d ", c);

return 0;

}

Q2.Write a program to print first N terms of Fibonacci series

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, a = 0, b = 1, c;

printf("Enter number = ");

scanf("%d", &num);

printf("%d %d ", a, b);

for (int i = 2; i < num; ++i)

{

c = a + b;

printf("%d ", c);

a = b;

b = c;

}

return 0;

}

Q3.Write a program to check whether a given number is there in the Fibonacci series or not.

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, a = 0, b = 1, c = 0;

printf("Enter number = ");

scanf("%d", &num);

while (c < num)

{

c = a + b;

a = b;

b = c;

}

if (c == num)

{

printf("Number found");

}

else

{

printf("Number not found");

}

return 0;

}

Q4.Write a program to calculate HCF of two numbers

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a, b, c, flag = 0,i;

printf("Enter two number = ");

scanf("%d %d", &a, &b);

if (a > b)

{

int tmp = b;

b = a;

a = tmp;

}

if (b % a == 0)

{

printf("HCF = %d", a);

flag = 1;

}

else

for (i = a / 2; !((a % i==0) && (b % i==0)); i--);

if (flag == 0)

printf("HCF = %d", i);

return 0;

}

Q5.Write a program to check whether two given numbers are co-prime numbers or not

#include <stdio.h>

int main(int argc, char \*argv[])

{

int a, b, c, flag = 0, i;

printf("Enter two number = ");

scanf("%d %d", &a, &b);

if (a > b)

{

int tmp = b;

b = a;

a = tmp;

}

if (b % a == 0)

{

printf("number is not co-prime");

flag = 1;

}

else

for (i = a / 2; !((a % i == 0) && (b % i == 0)); i--);

if (i == 1)

printf("number is co-prime");

else if (i > 1)

printf("number is not co-prime");

return 0;

}

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

#include <stdio.h>

int main(int argc, char \*argv[])

{

int flag = 0;

for (int i = 2; i <= 100; i++)

{

flag = 0;

for (int j = 2; j <= i / 2; j++)

if (i % j == 0)

{

flag = 1;

break;

}

if (flag == 0)

printf("%d ", i);

}

return 0;

}

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

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num1, num2, i = 2, flag = 0;

printf("Enter two numbers = ");

scanf("%d %d", &num1, &num2);

while (num1 <= num2)

{

while (i <= num1 / 2)

{

if (num1 % i != 0)

i++;

else

{

flag = 1;

break;

}

}

if (flag == 1)

flag = 0;

else if ((num1 != 0) && (num1 != 1))

printf("%d ", num1);

num1++;

i=2;

}

return 0;

}

Q8.Write a program to find next Prime number of a given number

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, flag = 0;

printf("Enter number = ");

scanf("%d", &num);

while (flag == 0)

{

int i = 2;

num = num + 1;

while (i <= num / 2)

{

if (num % i == 0)

break;

else

i++;

}

if ((i > num / 2) && (num > 1))

{

flag = 1;

printf("%d", num);

}

}

return 0;

}

Q9.Write a program to check whether a given number is an Armstrong number or not

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num, rem, cube = 0;

printf("Enter number = ");

scanf("%d", &num);

int temp = num;

while (num)

{

rem = num % 10;

cube = cube + (rem \* rem \* rem);

num = num / 10;

}

if ((temp == cube) && (temp != 000))

printf("Number is armstrong");

else

printf("Number is not armstrong");

return 0;

}

Q10. Write a program to print all Armstrong numbers under 1000

#include <stdio.h>

int main(int argc, char \*argv[])

{

int num = 100, cube, rem;

while (num <= 1000)

{

int temp = num;

cube = 0;

while (temp)

{

rem = temp % 10;

cube = cube + (rem \* rem \* rem);

temp = temp / 10;

}

if (cube == num)

printf("%d ", cube);

num++;

}

return 0;

}