

Assignment 11

① #include <stdio.h>
int Lcm(int, int);
int main()
{
 int num1, num2, LCM;
 printf("Enter 2 numbers\n");
 scanf("%d %d", &num1, &num2);
 LCM = Lcm(num1, num2);
 printf("Lcm of %d and %d is %d", num1, num2, LCM);
 return 0;
}

int Lcm(int num1, int num2)
{

int i=2, j=2, c, d;

for(; ;)

{

c = num1 * i;

d = num2 * j;

if(c == d)

return c;

c > d ? j++ : i++;

}

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② #include <stdio.h>
int findHCF(int, int);
int main()
{
 int num1, num2, HCF;
 printf("Enter 2 numbers\n");
 scanf("%d %d", &num1, &num2);
 HCF = findHCF(num1, num2);
 printf("HCF of %d and %d is %d", num1, num2, HCF);
 return 0;
}

int findHCF(int num1, num2)
{
 int d=1, i=2;
 for(i=2; i<=(num1>num2?num1:num2); i++)
 {
 if ((num1 % i == 0) && (num2 % i == 0))
 d = d>i?d:i;
 }
 return d;
}

③ #include <stdio.h>
int checkPrime(int);

int main()
{

int number, result;

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

scanf("%d", &number);

Result = checkPrime(number);

if (Result == 1)

printf("Prime Number");

else

printf("Not a Prime Number.");

return 0;

}

int checkPrime (int number);

{

int i, count = 0;

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

{

if (number % i == 0)

{

count = 1;

break;

}

}

if (count == 0)

return 1;

else

return 0;

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④ #include <stdio.h>
int nextPrime(int);
int main()
{
 int number, NextPrime;
 printf("Enter a number\n");
 scanf("%d", &number);
 NextPrime = nextPrime(number);
 printf("Prime Number after %d is %d", number, NextPrime);
 return 0;
}

int nextPrime(int number)
{
 int i = number + 1, count, j;
 for (; ; i++)
 {

count = 0;
 for (j = 2; j <= i / 2; j++)

if (i % j == 0)
 {

count = 1;
 break;

}

if (count == 0)
 return i;

}

⑤ #include <stdio.h>

void primeNumbers(int);

int main()

{

int number;

printf("Enter number of prime numbers you want to print\n");

scanf("%d", &number);

primeNumbers(number);

return 0;

}

void primeNumbers(int number)

{

int i, j, count, k=2;

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

{

count = 0;

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

{

if (k % j == 0)

{

count = 1;

break;

}

}

if (count == 0)

* printf("%d ", k);

k++;

}

⑥ #include <stdio.h>

void printPrime(int, int);

int main()

{

int number, int range1, range2;

printf("Enter the ranges between the which you want prime no")

scanf("%d %d", &range1, &range2);

printf("Prime Numbers between %d and %d are : \n", range1, range2);

printPrime(range1, range2);

return 0;

}

void printPrime(int range1, int range2)

{

int i, j, count;

for(i=range1 ; i <= range2 ; i++)

{

count = 0;

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

{

if((i % j) == 0)

{

count = 1;

break;

}

}

if(count == 0)

printf("%d ", i);

}

?

7 #include <stdio.h>
 void printfib(int);
 int main()
 {
 int number;
 printf("Enter number of terms you want to print\n");
 scanf("%d", &number);
 printf("The fibonacci terms are: \n", number);
 printfib(number);
 return 0;
 }

Void printfib(int number)

{
 int a = -1, b = 1, c, k;
 for (c = 4; k <= number; k++)
 {
 c = a + b; \rightarrow printf("%d ", c);
 a = b;
 b = c;
 }
}

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⑨ #include <stdio.h>
int findSquare(int);
int main()
{
 int number, square;
 printf("Enter a number\n");
 scanf("%d", &number);
 square = findSquare(number);
 printf("Square of %d is %d", number, square);
 return 0;
}

int findSquare(int number)
{

return number * number;

}

⑩ #include <stdio.h>
int sum(int n)
int main()
{

int terms, result;
 printf("Enter no. of terms\n");

scanf("%d", &terms);

result = sum(terms);

printf("Sum of series is %d", result);

return 0;

y

int sum(int terms)

{
 int sum=0, fact, i, j;
 for(i=1; i<=terms; i++)

{
 fact = 1;
 for(j=i; j>0; j--)
 fact = fact * j;
 }
 sum = sum + fact/i;

}{
 return sum;

}{

⑩ #include <stdio.h>

Void printPascal(int r, int c);

int main()

{

 int rows, columns;
 printf("Enter rows and columns\n");
 scanf("%d %d", &rows, &columns);
 printPascal(rows, columns);
 return 0;

}{