//natural even

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace NATURAL\_EVEN

{

class Program

{

static void Main(string[] args)

{

int i;

Console.Write("\n\n");

Console.Write("Display the first 10 natural numbers:\n");

Console.Write("---------------------------------------");

Console.Write("\n\n");

Console.WriteLine("The first 10 natural number are:");

for (i = 1; i <= 10; i++)

{

if(i % 2 == 0)

{

Console.Write("{0} ", i);

}

}

// Console.Write("\n\n");

Console.ReadLine();

}

}

}

//natural\_num

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace NATURAL\_NUM

{

class Program

{

static void Main(string[] args)

{

int i;

Console.Write("\n\n");

Console.Write("Display the first 10 natural numbers:\n");

Console.Write("---------------------------------------");

Console.Write("\n\n");

Console.WriteLine("The first 10 natural number are:");

for (i = 1; i <= 10; i++)

{

Console.Write("{0} ", i);

}

// Console.Write("\n\n");

Console.ReadLine();

}

}

}

//natural\_rev

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace NATURAL\_REV

{

class Program

{

static void Main(string[] args)

{

int i;

Console.Write("\n\n");

Console.Write("Display the first 10 natural numbers:\n");

Console.Write("---------------------------------------");

Console.Write("\n\n");

Console.WriteLine("The first 10 reverse natural number are:");

for (i = 10; i >=1; i--)

{

Console.Write("{0} ", i);

}

// Console.Write("\n\n");

Console.ReadLine();

}

}

}

//ncr

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace NCR

{

class Program

{

static void Main(string[] args)

{

//Write a program to find ncr. Hint: ncr = (n! / ((n - r)!\*r!)

int n, r, per, fact, fact1, fact2;

Console.WriteLine("Enter the Value of 'n' and 'r' to " +

"find the Permutation :");

n = Convert.ToInt32(Console.ReadLine());

r = Convert.ToInt32(Console.ReadLine());

fact = n;

for (int i = n - 1; i >= 1; i--)

{

fact = fact \* i;

}

fact2 = r;

for (int i = r - 1; i >= 1; i--)

{

fact2 = fact2 \* i;

}

int number;

number = n - r;

fact1 = number;

for (int i = number - 1; i >= 1; i--)

{

fact1 = fact1 \* i;

}

fact1 = fact2 \* fact1;

per = fact / fact1;

Console.WriteLine("Combination : {0}", per);

Console.ReadLine();

}

}

}

//pattern2

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace PATTERN2

{

class Program

{

static void Main(string[] args)

{

// 5

// 4 5 4

// 3 4 5 4 3

// 2 3 4 5 4 3 2

//1 2 3 4 5 4 3 2 1

int n;

Console.WriteLine("enter a number:");

n = Convert.ToInt32(Console.ReadLine());

for(int i = n; i >= 1; i--)

{

for(int j = i; j <= n; j++)

{

Console.Write(j);

}

for(int k = (n - 1); k >= i; k--)

{

Console.Write(k);

}

Console.WriteLine();

}

Console.ReadLine();

}

}

}

//pattern-3

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace PATTERN3

{

class Program

{

static void Main(string[] args)

{

int i, j, k, n;

Console.WriteLine("enter a number");

n = Convert.ToInt32(Console.ReadLine());

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

{

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

{

Console.Write(j);

}

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

{

Console.Write(k);

}

Console.WriteLine();

}

Console.ReadLine();

}

}

}

//prime-n

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace PRIME\_N

{

class Program

{

static void Main(string[] args)

{

// Write a program to generate the first n prime numbers in the series

//2,3,5,7,11,..., 17

int num, i, ctr, stno, enno;

Console.Write("Find the prime numbers within a range of numbers:\n");

Console.Write("Input starting number of range: ");

stno = Convert.ToInt32(Console.ReadLine());

Console.Write("Input ending number of range : ");

enno = Convert.ToInt32(Console.ReadLine());

Console.Write("The prime numbers between {0} and {1} are : \n", stno, enno);

for (num = stno; num <= enno; num++)

{

ctr = 0;

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

{

if (num % i == 0)

{

ctr++;

break;

}

}

if (ctr == 0 && num != 1)

Console.Write("{0} ", num);

}

Console.Write("\n");

Console.ReadKey();

}

}

}

//prime\_2\_to\_100

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace PRIME\_2\_TO\_100

{

class Program

{

static void Main(string[] args)

{

bool isPrime = true;

int i, j;

//Calculate and display the Prime number

Console.WriteLine("Prime Numbers are : ");

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

{

for (j = 2; j <= 100; j++)

{

if (i != j && i % j == 0)

{

isPrime = false;

break;

}

}

if (isPrime)

{

Console.Write("\n`" + i);

}

isPrime = true;

}

Console.ReadKey();

}

}

}

//reverse

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace REVERSE

{

class Program

{

static void Main(string[] args)

{

int n, r = 0;

Console.Write("Enter the Number to reverse= ");

n = int.Parse(Console.ReadLine());

while (n > 0)

{

r = r \* 10;

r = r + n % 10;

n = n / 10;

}

Console.Write("reverse of a number is " + r);

Console.ReadLine();

}

}

}