Q1.Write a program to calculate sum of first N natural numbers

#include <stdio.h>

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

{

int num, tmp, sum = 0;

printf("Enter number = ");

scanf("%d", &num);

tmp = num;

do

{

sum += num;

num--;

} while (num);

printf("Sum of first %d natural number = %d", tmp, sum);

return 0;

}

Q2.Write a program to calculate sum of first N even natural numbers

#include <stdio.h>

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

{

int num, sum = 0;

printf("Enter number = ");

scanf("%d", &num);

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

sum += i;

printf("Sum of first %d even natural numbers = %d", num, sum);

return 0;

}

Q3.Write a program to calculate sum of first N odd natural numbers

#include <stdio.h>

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

{

int num, sum = 0;

printf("Enter number = ");

scanf("%d", &num);

for (int i = 1; i <= num; i += 2)

sum += i;

printf("Sum of first %d odd natural numbers = %d", num, sum);

return 0;

}

Q4.Write a program to calculate sum of squares of first N natural numbers

#include <stdio.h>

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

int num,sum=0;

printf("Enter number = ");

scanf("%d",&num);

int tmp=num;

while (num)

{

sum+=(num\*num);

num--;

}

printf("Sum of squares of first %d natural numbers = %d",tmp,sum);

return 0;

}

Q5.Write a program to calculate sum of cubes of first N natural numbers

#include <stdio.h>

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

{

int num, tmp, sum;

printf("Enter number = ");

scanf("%d", &num);

do

{

sum += (num \* num \* num);

num--;

} while (num);

printf("Sum of cubes of first %d natural numbers = %d", tmp, sum);

return 0;

}

Q6.Write a program to calculate factorial of a number

#include <stdio.h>

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

{

int num, fact = 1;

printf("Enter number = ");

scanf("%d", &num);

int tmp = num;

while (num)

{

fact \*= num;

num--;

}

printf("Factorial of %d = %d", tmp, fact);

return 0;

}

Q7.Write a program to count digits in a given number

#include <stdio.h>

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

{

int num, rem, count = 0;

printf("Enter number = ");

scanf("%d", &num);

while (num)

{

rem = num % 10;

num = num / 10;

count++;

}

printf("Digit in given number = %d", count);

return 0;

}

Q8.Write a program to check whether a given number is a Prime number or not

#include <stdio.h>

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

{

int num, i = 2;

printf("Enter number = ");

scanf("%d", &num);

while ((num % i != 0) && (i < num))

{

i++;

}

if (i == num)

printf("%d number is prime", num);

else

printf("number is not prime");

return 0;

}

Q9.Write a program to calculate LCM of two numbers

#include <stdio.h>

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

{

int a, b, i = 2, sum = 1, flag = 0;

printf("Enter two numbers = ");

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

while ((a != 1) || (b != 1))

{

if (a % i == 0)

{

a = a / i;

flag = 1;

}

if (b % i == 0)

{

b = b / i;

flag = 1;

}

if (flag == 1)

sum = sum \* i;

if ((a % i != 0) && (b % i != 0))

{

i++;

flag = 0;

}

}

printf("%d", sum);

return 0;

}

Q10.Write a program to reverse a given number

#include <stdio.h>

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

{

int num, rem, rev = 0;

printf("Enter number = ");

scanf("%d", &num);

while (num)

{

rev = (10 \* rev + num % 10);

num /= 10;

}

printf("%d", rev);

return 0;

}