Qno.1)

#include <stdio.h>

#include <stdbool.h>

bool is\_prime(int n) {

if (n <= 1) {

return false;

}

for (int i = 2; i < n; i++) {

if (n % i == 0) {

return false;

}

}

return true;

}

int main() {

int n;

printf("Enter any number: ");

scanf("%d", &n);

if (is\_prime(n)) {

printf("prime number?: Yes\n");

} else {

printf("prime number?: No\n");

}

return 0;

}

Qno.2)

#include <stdio.h>

int main()

{

int num1, num2, result;

printf("Enter two integers: ");

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

result = num1 & num2;

printf("The answer after ANDing is: %d", result);

return 0;

}

Qno.3)

#include <stdio.h>

int main()

{

int num, i;

int first = 0, second = 1, next;

printf("Enter the number of terms: ");

scanf("%d", &num);

printf("Fibonacci series: ");

for (i = 0; i < num; i++) {

if (i <= 1)

next = i;

else {

next = first + second;

first = second;

second = next;

}

printf("%d, ", next);

}

return 0;

}

Qno.4)

#include <stdio.h>

int main() {

int n;

float sum = 0.0;

printf("Enter the value of n: ");

scanf("%d", &n);

for (int i = 1; i <= n; i++) {

sum += 1.0/i;

}

printf("Sum of reciprocal of n: %.2f\n", sum);

return 0;

}

Qno.5)

#include <stdio.h>

int main() {

int n = 5, i, array[n];

int max = 0;

printf("Enter elements for array: ");

for (i = 0; i < n; i++) {

scanf("%d", &array[i]);

}

for (i = 0; i < n; i++) {

if (array[i] > max) {

max = array[i];

}

}

printf("maximum number = %d\n", max);

return 0;

}

Qno.6)

#include <stdio.h>

int main() {

int i, j;

int a[3][2], b[3][2], c[3][2];

printf("Enter value for 1 matrix: ");

for (i = 0; i < 3; i++) {

for (j = 0; j < 2; j++) {

scanf("%d", &a[i][j]);

}

}

printf("Enter value for 2 matrix: ");

for (i = 0; i < 3; i++) {

for (j = 0; j < 2; j++) {

scanf("%d", &b[i][j]);

}

}

for (i = 0; i < 3; i++) {

for (j = 0; j < 2; j++) {

c[i][j] = a[i][j] + b[i][j];

}

}

printf("Sum of matrix is\n");

for (i = 0; i < 3; i++) {

for (j = 0; j < 2; j++) {

printf("%d ", c[i][j]);

}

printf("\n");

}

return 0;

}

Qno.7)

#include <stdio.h>

int main() {

int n, i;

int array[100];

int sum = 0;

float average;

printf("Enter length of array: ");

scanf("%d", &n);

printf("Enter each element in array: ");

for (i = 0; i < n; i++) {

scanf("%d", &array[i]);

sum += array[i];

}

average = (float)sum / n;

printf("Average value in array: %.2f\n", average);

return 0;

}