Practical-05

Q 1.1

#include<stdio.h>

int main()

{

int x=0;

while (x<=100)

{

printf("%d ",x);

x=x+1;

}

}

Q 1.2

#include<stdio.h>

int main()

{

int x=0;

do

{

printf("%d ",x);

x=x+1;

}while (x<=100);

}

Q 1.3

#include<stdio.h>

int main()

{

int x;

for (x=0; x<=100; x=x+1)

{

printf("%d ",x);

}

}

Q2

#include<stdio.h>

int main()

{

int counter=1,sum=0,n1;

float avg;

while (counter<=10)

{

printf("Enter %d marks: ",counter);

scanf("%d",&n1);

sum=sum+n1;

counter++;

}

avg=(float)sum/10.0;

printf("Average is %.2f\n",avg);

if (avg<=50.0)

{

printf("You Exam Fail");

}

else

{

printf("You Exam Pass");

}

return 0;

Q3

#include<stdio.h>

int main()

{

int num,fac=1,i;

printf("Enter number: ");

scanf("%d",&num);

if (num<=0)

{

printf("Error! Factorial");

}

else {

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

fac\*=i;

}

}

printf("Factorial %d=%d",num,fac);

return 0;

Q4

#include<stdio.h>

int main()

{

int n1,sum=0,i;

int counter;

printf("How many number to get sum: ");

scanf("%d",&counter);

for ( i = 0; i <= counter; i++)

{

printf("Enter number: ");

scanf("%d",&n1);

sum += n1;

}

printf("SUM = %d\n",sum);

return 0;

Q5

#include <stdio.h>

int main()

{

int number, reversedNumber = 0, remainder;

printf("Enter a number: ");

scanf("%d", &number);

do {

remainder = number % 10;

reversedNumber = reversedNumber \* 10 + remainder;

number /= 10;

} while (number != 0);

printf("Reversed number: %d\n", reversedNumber);

return 0;

}

Q6

#include<stdio.h>

int main()

{

int basevalue, exponentvale;

int power = 1;

printf("Enter base value: ");

scanf("%d",&basevalue);

printf("Enter exponent value: ");

scanf("%d",&exponentvale);

for (int i = 0; i < exponentvale; i++)

{

power \*= basevalue;

}

printf("%dth of the %d = %d\n", exponentvale, basevalue, power);

return 0;

}

Q7

#include <stdio.h>

int main()

{

int num1 = 0, num2 = 1, nextNum, count;

printf("Fibonacci Sequence: ");

for (count = 0; count < 10; count++) {

if (count <= 1)

nextNum = count;

else {

nextNum = num1 + num2;

num1 = num2;

num2 = nextNum;

}

printf("%d ", nextNum);

}

return 0;

Q8

#include <stdio.h>

#include <math.h>

int isArmstrong(int number);

int main() {

int number;

printf("Enter a number: ");

scanf("%d", &number);

if (isArmstrong(number))

printf("%d is an Armstrong number.\n", number);

else

printf("%d is not an Armstrong number.\n", number);

return 0;

}

int isArmstrong(int number) {

int originalNumber, remainder, result = 0, n = 0;

originalNumber = number;

// count the number of digits

while (originalNumber != 0) {

originalNumber /= 10;

++n;

}

originalNumber = number;

// calculate the result

while (originalNumber != 0) {

remainder = originalNumber % 10;

result += pow(remainder, n);

originalNumber /= 10;

}

// check if number is Armstrong

if (result == number)

return 1;

else

return 0;

Q9

#include<stdio.h>

int main()

{

char letter;

printf("ASCII value for letters A to Z: \n");

for ( letter = 'A'; letter <= 'Z'; ++letter)

{

printf("%c : %d\n",letter,letter);

}

return 0;

Q10

#include<stdio.h>

int main()

{

int x,y;

for ( x = 1; x <= 5; x++)

{

for ( y = 1; y <= x; y++)

{

printf("\* ");

}

printf("\n");

}

return 0;