**Ques 1: Write a Program to Display name on screen using class?**

Ans 1: #include <iostream>

using namespace std;

class name {

public:

void display() // display function

{

cout<<"I AM ROBIN TOMAR"<<endl;

}

};

int main()

{

name obj1;

obj1.display();

return 0;

}

**Ques 2: WAP to find area of circle using class?**

Ans 2:

#include<iostream>

using namespace std;

class Test {

public:

float r, area;

void input() {

cout << "Enter radius of a circle:";

cin >> r;

}

void findArea() {

area = 3.14 \* r \* r;

}

void display() {

cout << "Area of circle is:" << area;

}

};

int main() {

Test obj;

obj.input();

obj.findArea();

obj.display();

return 0;

}

**Ques 3: WAP to Find simple interest (si = p\*r\*t / 100) using class?**

Ans 3:

#include <iostream >

using namespace std;

class simpleInterest {

public:

double p;

double rate ;

double time ;

double si;

void input()

{

cout<<"PLEASE ENTER THE PRINCIPLE AMOUNT";

cin>>p;

cout<<"PLEASE ENTER THE RATE OF INTEREST";

cin>>rate;

cout<<"PLEASE ENTER THE TIME DURATION";

cin>>time;

}

void calc()

{

si=p\*r\*t/100;

}

void display(){

cout<<"YOUR SIMPLE INTEREST WILL BE "<<si<<endl;

}

};

int main()

{

simpleInterest obj1;

obj1.input();

obj1.calc();

obj1.display();

return 0;

}

**Ques 4: WAP to check whether a person is male or female using class?**

Ans 4: #include<iostream >

using namespace std;

class findMaleOrFemale

{

public:

char gender;

void input()

{

cout<<"Please enter The Character M or F";

cin>>gender;

}

void calc ()

{

if (gender=='m'||gender=='M')

{

cout<<"He is the male ";

}

else if (gender=='f'||gender=='F')

{

cout<<"She is Female ";

}

else{

cout<<"it is the invalid input";

}

}

};

int main()

{

findMaleOrFemale obj;

obj.input();

obj.calc();

return 0;

}

**Ques 5: WAP to Find salary of a person whose basic is greater than 20,000 and hra: 2%. In other case, hra: 1.2%.**

Ans 5: #include<iostream>

using namespace std;

class salary

{

public:

float sal;

float hra;

float basic;

void input()

{

cout<<"Please Enter Your salary";

cin>>basic;

}

void find()

{

if (basic>=20000)

{

sal=(basic\*2)/100;

}

else {

sal=(basic\*1.2)/100;

}

}

void display()

{

cout<<" ......PLEASE FIND SALARY DETAILS BELOW....... "<<endl;

cout<<"You have Entered Your Basic Salary is =="<<basic<<endl;

cout<<"Your HRA will be "<<sal<<endl;

cout<<"Your total salary will be =="<<sal+basic<<endl;

}

};

int main()

{

salary obj1;

obj1.input();

obj1.find();

obj1.display();

return 0;

}

**Ques 6: WAP to Find root of a quadratic equation. (if/else)**

Ans 6:

#include<iostream>

#include<math.h>

using namespace std;

class root

{

public:

float a, b, c, x1, x2, discriminant, realPart, imaginaryPart;

void input()

{

cout<<"Enter coefficients A , B and C" ;

cin>>a>>b>>c;

}

void calc()

{

discriminant = b\*b - 4\*a\*c;

if (discriminant > 0) {

x1 = (-b + sqrt(discriminant)) / (2\*a);

x2 = (-b - sqrt(discriminant)) / (2\*a);

cout << "Roots are real and different." << endl;

cout << "x1 = " << x1 << endl;

cout << "x2 = " << x2 << endl;

}

else if (discriminant == 0) {

cout << "Roots are real and same." << endl;

x1 = -b/(2\*a);

cout << "x1 = x2 =" << x1 << endl;

}

else {

realPart = -b/(2\*a);

imaginaryPart =sqrt(-discriminant)/(2\*a);

cout << "Roots are complex and different." << endl;

cout << "x1 = " << realPart << "+" << imaginaryPart << "i" << endl;

cout << "x2 = " << realPart << "-" << imaginaryPart << "i" << endl;

}

}

};

int main()

{

root obj;

obj.input();

obj.calc();

return 0;

}

**Ques 7: Find whether the character entered is a vowel or a consonant.**

Ans 7: #include<iostream>

using namespace std;

class vowelOrConsonant

{

public:

char ch;

void input()

{

cout<<"Please Enter The Character ";

cin>>ch;

}

void calc()

{

switch(ch){

case 'a':

case 'e':

case 'i':

case 'o':

case 'u':

//check upper case vowel letters

case 'A':

case 'E':

case 'I':

case 'O':

case 'U':

cout<<ch<<" is a vowel";

break;

default:

cout<<"it is the consonant";

}

}

};

int main(){

vowelOrConsonant obj;

obj.input();

obj.calc();

return 0;

}

**Ques 8: Find sequence of a protein as given below:**

C = ccttaattaattccat

A = attcttcttc

T = ttatccta

Ans 8: #include<iostream>

using namespace std;

class sequence

{

public:

char ch;

void input()

{

cout<<"Please Enter The character ";

cin>>ch;

}

void calc()

{

switch(ch){

case 'C':

cout<<"ccttaattaattccat";

break;

case 'A':

cout<<"attcttcttc";

break;

case 'T':

cout<<"ttatccta";

break;

default:

cout<<"it is not protien sequence ";

}

}

};

int main(){

sequence obj;

obj.input();

obj.calc();

return 0;

}

**Ques 9: Generate number from 1 - 100.**

Ans 9: #include<iostream>

using namespace std;

class forLoop

{

public:

int i;

void dispaly(){

for(i=0;i<=100;i++)

{

cout<<i<<endl;

}

}

};

int main(){

forLoop obj;

obj.dispaly();

return 0;

}

**Ques 10: Display even number from 1 - 50 & find its sum.**

Ans 10: #include<iostream>

using namespace std;

class forLoop

{

public:

int i;

int sum = 0;

void dispaly(){

while(i<=50)

{

if(i%2==0)

{ cout<<i<<endl;

sum+=i;

}

i++;

}

cout<<"sum is ="<<sum<<endl;

}

};

int main(){

forLoop obj;

obj.dispaly();

return 0;

}

**Ques 11:WAP to find square of a number?**

Ans 11: #include<iostream>

using namespace std ;

class square

{

public:

int i;

float sq;

void input()

{

cout<<"Please Enter any NO.";

cin>>i;

}

void dispaly(){

sq=i\*i;

cout<<"square of the no is ="<<sq<<endl;

}

};

int main(){

square obj;

obj.input();

obj.dispaly();

return 0;

}

**Ques 12: Find sum of two numbers using function.**

Ans12: #include<iostream>

using namespace std ;

class sum

{

public:

float f,s;

float su;

void input()

{

cout<<"Please Enter First NO.";

cin>>f;

cout<<"please enter secont no.";

cin>>s;

}

void dispaly(){

su=f+s;

cout<<"sum of the two no is ="<<su<<endl;

}

};

int main(){

sum obj;

obj.input();

obj.dispaly();

return 0;

}

**Ques 13: WAP to Product of three numbers using function?**

Ans13: #include<iostream>

using namespace std ;

class product

{

public:

float f,s,t;

float su;

void input()

{

cout<<"Please Enter First NO."<<endl;

cin>>f;

cout<<"please enter secont no."<<endl;

cin>>s;

cout<<"please enter the third no"<<endl;

cin>>t;

}

void dispaly(){

su=f\*s\*t;

cout<<"Product of the three no is ="<<su<<endl;

}

};

int main(){

product obj;

obj.input();

obj.dispaly();

return 0;

}

**Ques 14: WAP to Swap values of two variables using function.**

Ans 14: #include<iostream>

using namespace std ;

class swapValue

{

public:

float f,s;

void input()

{

cout<<"Please Enter First NO."<<endl;

cin>>f;

cout<<"please enter second no."<<endl;

cin>>s;

}

void dispaly(){

swap(f,s);

cout<<"After Swapping first will be ="<<f<<endl;

cout<<"After Swapping second will be ="<<s<<endl;

}

};

int main(){

swapValue obj;

obj.input();

obj.dispaly();

return 0;

}

**Ques 15: WAP to find Area of a rectangle?**

Ans 15: #include<iostream>

using namespace std ;

class areaOfRectangle

{

public:

float f,s,a;

void input()

{

cout<<"Please Enter length of the rectangle ."<<endl;

cin>>f;

cout<<"please enter breadth od the rectangle ."<<endl;

cin>>s;

}

void dispaly(){

a=f\*s;

cout<<"Area of the rectangle is ="<<a;

}

};

int main(){

areaOfRectangle obj;

obj.input();

obj.dispaly();

return 0;

}