ASSIGNMENT---3(LOOPS)

1. WAP to display your name 5 times on screen ??

#include<iostream>

using namespace std;

class Name

{

char c;

public: void display()

{

cout<<"Your Name is\n";

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

{

cout<<"SAI MARADALA"<<endl;

}

}};

int main()

{

Name n;

n.display();

}

1. WAP to display no 1 to 10 on screen ??

#include<iostream>

using namespace std;

class Number

{

int num;

public: void display()

{

cout<<"Numbers are:\n";

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

{

cout<<num<<endl;

}}};

int main()

{

Number n;

n.display();

}

1. WAP to display first 10 even numbers ??

#include<iostream>

using namespace std;

class Even

{

int num;

public: void display()

{

cout<<"1st Ten Even Numbers are:\n";

for(num=1;num<=20;num++)

{

if(num%2==0)

cout<<num<<endl;

}}};

int main()

{

Even e;

e.display();

}

1. WAP to display first 100 odd numbers ??

#include<iostream>

using namespace std;

class Odd

{

int num;

public: void display()

{

cout<<"1st Hundered odd Numbers are:\n";

for(num=1;num<=200;num++)

{

if(num%2==1)

cout<<num;

}}

void display2()

{

cout<<endl<<"1st Hundered Even Numbers are:\n";

for(num=1;num<=200;num++)

{

if(num%2==0)

cout<<num;

}}

};

int main()

{

Odd o;

o.display();

o.display2();

}

1. WAP to display the table of any number ??

#include<iostream>

using namespace std;

class Table

{

int n1,n2;

public: void display()

{

cout<<"Fourth Table is:\n";

cin>>n2;

for(n1=1;n1<=10;n1++)

{

cout<<n2<<"\*"<<n1<<"="<<n1\*n2<<endl;

}}};

int main()

{

Table t;

t.display();

}

1. WAP to display the sum of first 10 natural number(1 2 3…) ??

#include<iostream>

using namespace std;

class Natural

{

int num;

public: void display()

{

cout<<"1st Ten Natural Numbers are:\n";

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

{

cout<<num<<endl;

}}};

int main()

{

Natural n;

n.display();

}

1. WAP to display Characters from A to Z Using Loop ??

#include<iostream>

using namespace std;

class Alphabets

{

char ch;

public: void display()

{

cout<<"Alphabets are:\n";

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

{

cout<<ch;

}}};

int main()

{

Alphabets a;

a.display();

}

1. WAP to display the series from 10 to 1 in reverse order ??

#include<iostream>

using namespace std;

class Natural\_R

{

int num;

public: void display()

{

cout<<"Reverse Numbers are:\n";

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

{

cout<<num<<endl;

}}};

int main()

{

Natural\_R n;

n.display();

}

1. WAP to display the reverse of a number ??

#include<iostream>

using namespace std;

class Reverse\_num

{

int n,reverse=0,rem;

public: void display()

{

cout<<"Enter a number: ";

cin>>n;

while(n!=0)

{

rem=n%10;

reverse=reverse\*10+rem;

n/=10;

}

cout<<"Reversed Number: "<<reverse<<endl;

}};

int main()

{

Reverse\_num n;

n.display();

}

1. WAP to check whether a no is palindrome or not ??

#include<iostream>

using namespace std;

class Palindrome

{

int n,r,sum=0,temp;

public: void check()

{

cout<<"Enter a number ";

cin>>n;

temp=n;

while(n>0)

{

r=n%10;

sum=(sum\*10)+r;

n=n/10;

}

if(temp==sum)

{

cout<<"Number is palindrome ";}

else{

cout<<"not a palindrome";

}

}};

int main()

{

Palindrome p;

p.check();

}

1. WAP to calculate the power of any base ??

#include<iostream>

using namespace std;

class Base

{

int base,exponent,i;

long power=1;

public: void calculate()

{

cout<<"Enter base\n"<<"Enter Exponent\n";

cin>>base>>exponent;

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

{

power=power\*base;

}

cout<<endl<<base<<"^"<<exponent<<":"<<power;

}

};

int main()

{

Base b;

b.calculate();

}

1. WAP to check whether the number is armstrong number or not ??

#include <iostream>

using namespace std;

class Armstrong

{

int n,r,sum=0,temp;

public: void check()

{

cout<<"Enter the Number";

cin>>n;

temp=n;

while(n>0)

{

r=n%10;

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

n=n/10;

}

if(temp==sum){

cout<<"Armstrong Number"<<endl;}

else{

cout<<"Not Armstrong Number"<<endl;}

}};

int main()

{

Armstrong a;

a.check();

}

1. WAP to calculate factorial of any number without recursion ??

#include <iostream>

using namespace std;

class Factorial

{

public: void calculate()

{

int i,fact=1,number;

cout<<"Enter any Number: ";

cin>>number;

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

{

fact=fact\*i;

cout<<fact<<endl;

}}};

int main()

{

Factorial f;

f.calculate();

}

14. WAP to calculate the sum of digits in a number ??

15. WAP to count the number of digits in a number.

16. WAP to calculate factorial of any number with recursion

17. WAP to display the Fibonacci series( 0 1 1 2 3 5 8 13 21 34)

18. WAP to check whether the number is prime or not

19. WAP to get the prime numbers between a given range.

20. WAP to display Floyd Triangle ??

#include <iostream>

using namespace std;

class Floyd

{

public: void display()

{

int n,i,c,a=1;

cout<<"Enter the number";

cin>>n;

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

{

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

{

cout<<a;

a++;

}

cout<<endl;

}

}};

int main()

{

Floyd f;

f.display();

}

21. Note- Floyd Triangle is like 1 2 3 4 5 6 7 8 9 10 WAP to display the reverse of String. WAP to check whether the String Is palindrome or not.