**NUMBER 1**

#include <iostream>

using namespace std;

int main()

{

int max;

int min;

int count;

float avg;

int sum;

int number;

max = 0;

min = 101;

sum = 0;

while(number!=-1)

{

cout << "ENTER -1 TO STOP ";

cout << "\nENTER GRADE BETWEEN 1-100\n";

cin >> number;

if(number < 1)

{

cout << "\nSTOP\n";

}

max=(number>max)?number:max;

min=(number<=min && number!=-1)?number:min;

sum += number;

count++;

avg = sum/count;

}

cout << "\nGRADES ENTERED = " << count;

cout << "\nMAX GRADE = " << max;

cout << "\nMIN GRADE = " << min;

cout << "\nAVG GRADE = " << avg;

}

**NUMBER 2**

#include <iostream>

#include <math.h>

using namespace std;

class c1

{

public:

void input();

void process();

void output();

int a;

int b;

int c;

int sum;

private:

};

void c1::input()

{

cout << "INPUT SQUARE VALUE = ";

cin >> a;

}

void c1::process()

{

b = 1;

while(b<=a)

{

c = b \* b;

sum += c;

b++;

}

cout << "SUM OF SQUARES = " << sum;

}

void c1::output()

{

}

int main()

{

c1 o1;

o1.input();

o1.process();

o1.output();

}

**NUMBER 3**

#include <iostream>

#include <math.h>

using namespace std;

class c1

{

public:

void input();

void process();

void output();

int sum;

int a;

private:

};

void c1::input()

{

cout << "SUM OF ODD NUMBERS FROM 1 - 10\n";

}

void c1::process()

{

a = 1;

sum = 0;

while(a <= 10)

{

sum += a;

a++;

a++;

}

cout << sum;

}

void c1::output()

{

}

int main()

{

c1 o1;

o1.input();

o1.process();

o1.output();

}

**NUMBER 4**

#include <iostream>

#include <math.h>

using namespace std;

class c1

{

public:

void input();

void process();

void output();

int sum;

int a;

private:

};

void c1::input()

{

cout << "ENTER VALUE = ";

cin >> a;

}

void c1::process()

{

if(a%3==0)

{

cout << a << " IS DIVISIBLE BY 3\n";

}

else

{

cout << a << " IS NOT DIVISIBLE BY 3";

}

}

void c1::output()

{

}

int main()

{

c1 o1;

o1.input();

o1.process();

o1.output();

}

**NUMBER 5**

#include <iostream>

#include <math.h>

using namespace std;

class c1

{

public:

void input();

void process();

void output();

int sum;

int a;

int c;

private:

};

void c1::input()

{

cout << "ENTER VALUE = ";

cin >> a;

}

void c1::process()

{

sum = 1;

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

{

sum \*= c;

}

cout << a << " FACTORIAL IS EQUAL TO " << sum;

}

void c1::output()

{

}

int main()

{

c1 o1;

o1.input();

o1.process();

o1.output();

}

**NUMBER 6**

#include <iostream>

#include <math.h>

using namespace std;

class c1

{

public:

private:

};

int main()

{

float sum;

float a;

float c;

int b;

sum = 0;

a = 0;

b = 0;

c = 0;

for(b=1; b<=3; b++)

{

cout << "ENTER VALUE m = ";

cin >> a;

cout << "ENTER VALUE b = ";

cin >> c;

sum = -c/a;

cout << "x VALUE = " << sum << "\n";

}

}

**NUMBER 7**

#include <iostream>

#include <math.h>

using namespace std;

int main()

{

float sum;

int a;

int b;

int c;

sum = 0;

b = 0;

for(b=1;b<=4;b++)

{

cout << "ENTER VALUE = ";

cin >> a;

cout << "ENTER POWER RAISED = ";

cin >> c;

sum = pow(a,c);

cout << a << " RAISED TO THE " << c << "TH POWER = " << sum << "\n";

a = 0;

c = 0;

}

}

**NUMBER 8**

#include <iostream>

#include <math.h>

using namespace std;

int main()

{

int a;

int b;

int c;

int d;

b = 0;

d = 0;

c = 0;

cout << "INTEGER VALUE = ";

cin >> a;

for(b=0;b<=a;b++)

{

d = a - b;

c += d;

}

cout <<"\nRESULT = " << c;

}

**NUMBER 9**

#include <iostream>

#include <math.h>

using namespace std;

int main()

{

float sum;

float a;

float b;

double c = 0.01;

sum = 0;

b = 0;

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

{

cout << "DAY " << b << " = $" << c << "\n";

c \*= 2;

}

}

**NUMBER 10**

#include <iostream>

#include <math.h>

using namespace std;

int main()

{

int min;

int a;

int b;

int c;

int d;

min = 0;

b = 0;

cout << "NUMBER OF MINUTES = ";

cin >> min;

c = 1;

a = 1;

for(b=1;b<=min;b++)

{

d = c + a;

c = a;

a = d;

}

cout <<"\nNUMBER OF BACTERIA = " << d;

}

**NUMBER 11**

#include <iostream>

using namespace std;

int main()

{

char x;

float a;

float b;

float c;

float d;

float e;

float f;

float g;

float h;

float i;

cout << "YES -- Y\nNO -- N";

cout << "\nIS PLAYER A PITCHER Y OR N -------> ";

cin >> x;

if (x == 'Y')

{

cout << "NUMBER OF GAMES WON = ";

cin >> a;

cout << "NUMBER OF GAMES LOST = ";

cin >> b;

cout << "INNINGS PITCHED = ";

cin >> c;

cout << "EARNED RUNS ALLOWED = ";

cin >> d;

cout << "WIN-LOST PERCENTAGE = " << a / (a+b);

cout << "\nEARNED RUN AVG = " << 9 \* (d/c);

}

else if(x == 'N')

{

cout << "TIMES AT BAT = ";

cin >> e;

cout << "NUMBER OF SINGLES = ";

cin >> f;

cout << "NUMBER OF DOUBLES = ";

cin >> g;

cout << "NUMBER OF TRIPLES = ";

cin >> h;

cout << "NUMBER OF HOME RUNS = ";

cin >> i;

cout << "BATTING AVG = " << (f + g + h + i)/e;

cout << "\nSLUGGING AVG = " << f + (2\*g) + (3 \* h) + (4 \* i);

}

else

{

cout<<":)";

}

}

**NUMBER 12**

#include<iostream>

using namespace std;

int main()

{

int i;

int c;

i = 1;

c = 1;

cout << "MULTIPLICATION TABLE" << "\n\n";

cout << " 1 2 3 4 5 6 7 8 9\n";

for(i=1; i<=9; i++)

{

cout << i << "| ";

for(c=1; c<=9; c++)

{

cout << " " << i \* c ;

}

cout << "\n";

}

}

**NUMBER 13**

**NUMBER 14**

#include<iostream>

using namespace std;

int main()

{

int i;

int c;

int b;

int k;

int binary[10];

cout << "BASE 10 NOTATION" << "\n\n";

cout << "INPUT INTEGER = ";

cin >> c;

b = 0;

i = 0;

while(c>0)

{

cout << b << "| " << c << " R" << c % b << "\n";

binary[i] = c%b;

c =c/b;

i++;

}

for(k=i-1;k>=0;k--)

{

cout << binary[k];

}

}

**NUMBER 15**

#include<iostream>

using namespace std;

int main()

{

int i;

int c;

int b;

int k;

int g;

char hex[10];

cout << "BASE 16 NOTATION" << "\n\n";

cout << "INPUT INTEGER = ";

cin >> c;

b = 16;

i = 0;

g = 0;

while(c!=0)

{

cout << b << "| " << c << " R" << c % b << "\n";

g = c%b;

if(g < 10)

{

hex[i] = g + 48;

i++;

}

else

{

hex[i] = g + 55;

i++;

}

c = c/b;

}

for(k=i-1;k>=0;k--)

{

cout << hex[k];

}

return 0;

}

**NUMBER 16**

#include<iostream>

#include<math.h>

using namespace std;

int main()

{

int loanAmt;

float annualRate;

int monthPay;

cout << "INPUT LOAN AMOUNT = $";

cin >> loanAmt;

cout << "INPUT ANNUAL INTEREST RATE IN DECIMAL = ";

cin >> annualRate;

cout << "INPUT MONTHLY PAYMENT = $";

cin >> monthPay;

cout << "\nAMOUNT PAYED = $" << monthPay;

int a;

a = loanAmt-monthPay;

cout << "\nREMAINING BALANCE AFTER PAY = " << a;

cout << "\nMONTHLY INTEREST = " << annualRate / 12;

}