1

a.

03

b.

2-4-8-

c.

3413

d.

5 4.5 6 1.5

211110000

e.

3 0

f.

124816

g.

1003412521111…

h.

1002561

2.

9

69

5559

3

```
#include <iostream>
 using namespace std;
```

```
double enterGrades (int ia[256], double& mean)
{

	int n=0,ival=0, icnt =0;
	cout << "please enter N\n";
	cin >> n;
	cout << "please enter Grades\n";

	while (cin>> ival && icnt < n)
		ia [icnt++] = ival;

	int sum =0;
	for (int ix =0; ix < n; ++ix)
		sum += ia[ix];
	 mean = sum/n;
	return mean;
}

int main()
{
	int grades[256];
	double mean;
	enterGrades(grades, mean);

	cout << "average = " << mean << '\n';
	return 0;
}
```

4.

```
#include<iostream>
using namespace std;

class Complex
{
private:
		double real, imag;
public:
		Complex(double r=0, double i=0) {real =r; imag =i;}
		Complex operator +(const Complex&) const;
		friend Complex operator -(Complex&, Complex&);

		friend ostream& operator << (ostream& os, const Complex& m)
		{
			os << '(' << m.real << ',' << m.imag << ')';
			return os;
		}

};

Complex Complex::operator + (const Complex& m)
const {
	Complex result;
	result.real = this->real + m.real;
	result.imag + this->imag + m.imag;
	return result;
}
```

```
Complex operator -(    Complex& x, Complex& y)
{
        return Complex(x.real-y.real, x.imag-y.imag);
}

int main()
{
        Complex a(1.0,1.5);
        Complex b(1.0);
        Complex c(1.5,2.3);
        Complex d = a+ b;
        Complex e = a- b;
        cout << e;
}
```

5.

```
#include <iostream>
using namespace std;

int fact(int x)
{
        int S = 1;
        for (int i=1; i<=x; ++i)
                S *= i;
        return S;
}

int fact2(int x)
```

```
{
	int S=1;
	if(x>1)
		S = x * fact2(x-1);

	return S;
}

int main()
{
	cout << fact(6)<< '\n';
	cout << fact2(3) << '\n';
}
```

6.

```
#include <iostream>
using namespace std;
int sum(int a[], int first , int last)
{
	int s=0;
	for(int i=first; i<=last ; ++i)
		s += a[i];
	return s;
}
int main()
{
	int a[]= {1,2,3,4,5,6,7};
	cout << sum (a,3,5) << "\n";
}
```