**Array Functions and Loops**

Problem 1:

**#include**<iostream>

*using* *namespace* std;

int main(){

    int *a*[10] = {12,34,56,43,26,56,78,41,22,10};

*cout*<<"Normal Array : ";

**for**(int *i*=0;*i*<10;*i*++) *cout*<<" "<<*a*[*i*];

*cout*<<"\nReverse Array : ";

**for**(int *i*=9;*i*>=0;*i*--) *cout*<<" "<<*a*[*i*];

}

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Problem 2:

#include<iostream>

*using* *namespace* std;

int main(){

    int *a*[10] = {12,34,56,43,26,56,78,41,22,10};

    int *odd*=0,*even*=0;

*cout*<<"Array : ";for(int *i*=0;*i*<10;*i*++)*cout*<<*a*[*i*]<<" ";

    for(int *i*=0;*i*<10;*i*++){

        if(*a*[*i*]%2==0) *even*++;

        else *odd*++;

    }

*cout*<<"\nEven Numbers : "<<*even*<<endl;

*cout*<<"Odd numbers : "<<*odd*<<endl;

}

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Problem 3:

**#include**<iostream>

*using* *namespace* std;

void print(int s,int e){

*cout*<<"starting value : "<<s<<endl;

*cout*<<"Ending value : "<<e<<endl;

**for**(int *i*=s;*i*<=e;*i*++){

**if**(*i*%2!=0)*cout*<<" "<<*i*;

    }

}

int main(){

int *s*,*e*;*cin*>>*s*>>*e*;

print(*s*,*e*);

}

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Problem 4:

**#include**<iostream>

*using* *namespace* std;

int main() {

    int *a*[3][3] = {{12,13,14},{15, 16, 17},{18, 19, 20}};

    int *b*[3][3] = {{1,2,3}, {4,5,6}, {7,8,9}};

    int *c*[3][3] = {{101,104,107},{102,105,108},{103,106,109}};

    int *d*[3][3];

**for** (int *i* = 0; *i* < 3; *i*++) {

**for** (int *j* = 0; *j* < 3; *j*++) {

*d*[*i*][*j*] = *a*[*i*][*j*] + *b*[*i*][*j*] + *c*[*i*][*j*];

        }

    }

**for** (int *i*=0;*i*<3;*i*++) {

**for** (int *j*=0;*j*<3;*j*++) {

*cout*<< " " <<*d*[*i*][*j*];

        }

*cout*<<endl;

    }

}

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Problem 5:

**#include**<iostream>

*using* *namespace* std;

bool isprime(int s){

    int *c*=0;

**for**(int *i*=2;*i*<s;*i*++){

**if**(s%*i*==0)*c*++;

    }

**if**(*c*==0) **return** true;

**else** **return** false;

}

void factorial(int s){

    int *f*=1;

**for**(int *i*=s;*i*>=1;*i*--){

*f* = *f*\**i*;

    }

*cout*<<*f*<<endl;

}

int main(){

int *s*;*cin*>>*s*;

bool *prime* = isprime(*s*);

**if**(*prime*) {factorial(*s*);}

**else** *cout*<<"\nError"<<endl;

}

