1. Write a C program which can input some numbers and display how many of those numbers has more than five factors.

#include<stdio.h>

#include<math.h>

int main ()

{

int x[10000],n,i,j,y,a;

printf("Enter the total numbers:\n");

scanf("%d",&n);

printf("Enter the numbers one by one:\n");

a=0;

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

{

scanf("%d",&x[i]);

y=0;

for(j=1; j<=x[i]; j++)

{

if (x[i]%j==0)

{

y++;

}

}

if(y>5)

{

a++;

}

}

printf("Total numbers who has more than five factors: %d",a);

return 0;

}

2. Write a C program which can input some numbers and display how many of those numbers are prime.

#include<stdio.h>

#include<math.h>

int main ()

{

int x[10000],a,y,i,j,p;

printf("Enter the total numbers:\n");

scanf("%d",&a);

printf("Enter the numbers one by one:\n");

p=0;

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

{

y=0;

scanf("%d",&x[i]);

if(x[i]!=1)

{

for(j=2; j<x[i]; j++)

{

if(x[i]%j==0) {

y++;

}

}

if(y==0)

{

p++;

}

}

}

printf("Total prime numbers: %d",p);

return 0;

}

3. Write a C program which can input some numbers and display for each one the number of value bigger than that in the following list of numbers.

As example:

Input: 5 4 3 4 8 7

Output: 2 2 3 2 0 0

#include <stdio.h>

#include<math.h>

int main()

{

int x[1000],y,j,b,n,i;

printf("enter total numbers:\n ");

scanf("%d", &n);

printf("enter the numbers one by one:\n");

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

{

scanf("%d",&x[i]);

}

printf("each one the number of value bigger than that in the following list of numbers :\n");

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

{

b=0;

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

{

if(x[i]<(x[j]))

{

b=b+1;

}

}

printf("%d\t",b);

}

return 0;

}

4. Write a C program which can input some player’s weight and display how many two players team can be formed where both of the players weight is more than 80.

As example:

Input: 54 84 63 89 88

Output: 3

#include<stdio.h>

#include<math.h>

int main ()

{

int x[10000],a,y,i,j,p;

printf("Enter the total player’s numbers:\n");

scanf("%d",&a);

printf("Enter the weight one by one:\n");

y=0;

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

{

scanf("%d",&x[i]);

}

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

{

if(x[i]>80)

{

for(j=i+1; j<=a; j++)

{

if(x[j]>80)

{

y++;

}

}

}

}

printf("Total number of the both players weight is more than 80 is: %d",y);

return 0;

}

5. Write a C program which can input some numbers in an array and display how many pair are possible where both numbers are even

As example

Input: 5 4 8 7 6

Output: 3

[4 and 8, 4 and 6, 8 and 6]

#include <stdio.h>

int main()

{

int x[1000],n,i,j,c;

printf("enter total numbers:\n");

scanf("%d",&n);

printf("Enter the numbers one by one:\n");

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

{

scanf("%d",&x[i]);

}

c=0;

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

{

if(x[i]%2==0)

{

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

{

if(x[j]%2==0)

{

c++;

}

}

}

}

printf("Total number of pairs: %d\nAnd they are:\n",c);

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

{

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

{

if(x[i]%2==0 && x[j]%2==0)

{

printf ("(%d and %d)\n", x[i],x[j]);

}

}

}

return 0;

}

6. Write a C program which can display the following pattern using nested loop.

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#include<stdio.h>

#include<math.h>

int main(){

int i,j,n,a,b;

printf("Enter the total row of the starts you want:\n");

scanf("%d",&n);

printf("\n");

for(i=0; i<n; i++){

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

{

printf("?");

}

printf("\n");

}

return 0;

}

7. Write a C program which can display the following pattern using nested loop.

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#include<stdio.h>

#include<math.h>

int main(){

int i,j,n,a,b;

printf("Enter the total row of the starts you want:\n");

scanf("%d",&n);

for(i=0; i<n; i++){

for(j=0; j<i; j++){

printf("\*");

}

printf("\n");

}

return 0;

}

8. Write a C program which can display the following pattern using nested loop.

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#include<stdio.h>

#include<math.h>

int main(){

int i,j,n,a,b;

printf("Enter the total row of(? & \*) pattern you want:\n");

scanf("%d",&n);

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

for(j=1; j<=i; j++){

if(i%2==0){

printf("\*");}

else if(i%2!=0){

printf("?");}

}

printf("\n");

}

return 0;

}