22BCE5252

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OOPS ASSIGNMENT-2

1)

Code:

#include <stdio.h>

int main()

{

int a, b;

scanf("%d %d", &a, &b);

int result;

for (int i= 0; i < b; i++) {

result+=a;

}

printf("%d", result);

return 0;

}

Output:



2)

Code:

#include <stdio.h>

int main() {

int day;

scanf("%d", &day);

switch (day) {

case (1) :

printf("Sunday");

break;

case (2) :

printf("Monday");

break;

case (3) :

printf("Tuesday");

break;

case (4) :

printf("Wednesday");

break;

case (5) :

printf("Thursday");

break;

case (6) :

printf("Friday");

break;

case (7) :

printf("Saturday");

break;

}

return 0;

}

Output:



3)

Code:

#include <stdio.h>

int main() {

int hour;

scanf("%d", &hour);

int h= hour/100;

int m= hour%100;

if (h > 23) {

printf("Invalid");

}

else if (m > 59) {

printf("Invalid");

}

else {

if (h == 12) {

printf("%d:%d PM", h, m);

}

else if (h > 13) {

printf("%d:%d PM", (h-12), m);

}

else {

printf("%d:%d AM", (12-h), m);

}

}

return 0;

}

Output:



4)

Code:

#include <stdio.h>

int removed(int arr[], int n) {

if (n == 0 || n == 1) {

return n;

}

int temp[n];

int j= 0;

for (int i= 0; i < n-1; i++) {

if (arr[i] != arr[i+1]) {

temp[j++]= arr[i];

}

}

temp[j++]= arr[n-1];

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

arr[i] = temp[i];

}

return j;

}

int main() {

int n;

scanf("%d", &n);

int arr[n];

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

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

}

n= removed(arr, n);

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

printf("%d ", arr[i]);

}

return 0;

}

Output:



5)

Code:

#include <stdio.h>

void arrange(int arr[], int n) {

int temp[n];

int j= 0;

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

if (arr[i] != 0) {

temp[j++] = arr[i];

}

}

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

arr[i] = temp[i];

}

while (j < n) {

arr[j++] = 0;

}

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

printf("%d ", arr[i]);

}

}

int main() {

int n;

scanf("%d", &n);

int arr[n];

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

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

}

arrange(arr, n);

return 0;

}

Output:



6)

Code:

#include <stdio.h>

#include <math.h>

int main() {

int num;

scanf("%d", &num);

int c= 0;

int temp= num;

while(temp > 0) {

temp/=10;

c++;

}

int last= num%10;

int first= num/ (int)pow(10, c-1);

int middle= num % (int)pow(10, c-1);

middle= middle/10;

int newnum= (last\*pow(10,c-1)) + (middle\*10) + first;

printf("%d", newnum);

}

Output:



7)

Code:

#include <stdio.h>

#define swap(a, b) a^=b; b^=a; a^=b

void sort(int \*arr, int n);

void merge(int \*arr, int \*brr, int m, int n);

int main() {

int m, n;

scanf("%d %d", &m, &n);

int a[m], b[n];

for (int i= 0; i<m; i++) {

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

}

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

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

}

sort(a, m);

sort(b, n);

merge(a, b, m, n);

return 0;

}

void sort(int \*arr, int n) {

int temp;

for (int i= 0; i<n-1; i++) {

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

if (arr[i] > arr[j]) {

temp= arr[i];

arr[i]= arr[j];

arr[j]= temp;

}

}

}

}

void merge(int \*arr, int \*brr, int m, int n) {

int final, i, j;

final= m+n;

int c[final];

for (int i= 0; i<m; i++) {

c[i]= arr[i];

}

for (i= 0, j= m; j<final && i<n; i++,j++) {

c[j]= brr[i];

}

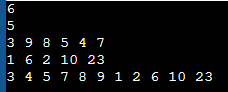
for (int i= 0; i<final; i++) {

printf("%d ", c[i]);

}

}

Output:



8)

Code:

#include <stdio.h>

#define max(a, b) ((a > b) ? a : b)

int main() {

int a, b;

scanf("%d %d", &a, &b);

int result= max(a, b);

printf("%d", result);

}

Output:



9)

Code:

#include <stdio.h>

int fact(int n) {

if ((n == 0) || (n == 1)) {

return 1;

}

else {

return n\*fact(n-1);

}

}

int main() {

int k= 7;

double sum= 0;

for (int i= 0; i<k; i++) {

double temp= (double) i/fact(i);

sum+= temp;

}

printf("%lf", sum);

}

Output:



10)

Code:

#include <stdio.h>

int main() {

int rows= 5, coef = 1, space, i, j;

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

for (space = 1; space <= rows - i; space++)

printf(" ");

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

if (j == 0 || i == 0)

coef = 1;

else

coef = coef \* (i - j + 1) / j;

printf("%4d", coef);

}

printf("\n");

}

return 0;

}

Output:

