OOPS IPS

1.STRING OPERATIONS-reverse each word in string

#include<stdio.h>

void reverse\_string(char str[], int start, int end)

{

char temp;

while(start<end)

{

temp=str[start];

str[start]=str[end];

str[end]=temp;

start++;

end--;

}

}

int main()

{

char str[]="reverse this string word by word";

int start, end;

end=0;

start=0;

while(str[end])

{

for(end=start;str[end]&&str[end]!=' ';end++);

reverse\_string(str, start, end-1);

start=end+1;

}

printf("%s ",str);

return 0;

}

To find the maximum occurring character in string

#include <stdio.h>

#include <string.h>

int main()

{

char str[100], result;

int i, len;

int max = -1;

int freq[256] = {0};

printf("\n Please Enter any String : ");

gets(str);

len = strlen(str);

for(i = 0; i < len; i++)

{

freq[str[i]]++;

}

for(i = 0; i < len; i++)

{

if(max < freq[str[i]])

{

max = freq[str[i]];

result = str[i];

}

}

printf("\n The Maximum Occurring Character in a Given String = %c ", result);

return 0;

}

TO COUNT NO OF WORDS IN STRING WITHOUT STRLEN FUNCTION

1. */\**
2. *\* C Program to Count Number of Words in a given Text Or Sentence*
3. *\*/*
4. #include <stdio.h>
5. #include <string.h>
7. void main()
8. {
9. char s[200];
10. int count = 0, i;
12. printf("Enter the string:**\n**");
13. scanf("%[^**\n**]s", s);
14. for (i = 0;s[i] != '**\0**';i++)
15. {
16. if (s[i] == ' ' && s[i+1] != ' ')
17. count++;
18. }
19. printf("Number of words in given string are: %d**\n**", count + 1);
20. }

2.sorts 2d array with respect to its COLUMNS FOR EACH ROW

#include<stdio.h>

int maxsorting(int r,int c){

int i,j,k,l;

int b[r][c];

int a[r][c];

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

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

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

b[i][j]=a[i][j];

}

}

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

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

for(k=j+1;k<c;++k){

if (a[i][j]<a[i][k]){

l=a[i][j];

a[i][j]=a[i][k];

a[i][k]=l;

}

}

}

}

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

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

printf("%d ",a[i][j]);

}

printf("\n");

}

return 0;

}

int main(){

int r,c;

int i,j;

scanf("%d %d",&r,&c);

maxsorting(r,c);

}

POINTERS

PROGRAM TO COPY ARRAY TO ANOTHER ARRAY

#include<stdio.h>

int product\_matrix(int \*p3[],int \*p1[],int \*p2[],int \*r,int \*c){

int i,j,k;

for (i=0;i<\*r;i++){

for (j=0;j<\*c;j++){

for (k=0;k<\*c;k++){

( \*(p3+i)+j)+=(\*(p1+i)+k)\*(\*(p2+k)+j));

}

}

}

}

int main(){

int r,c;

scanf("%d %d",&r,&c);

int a[r][c];

int b[r][c];

int (\*p1)[c]=a;

int (\*p2)[c]=b;

int i,j;

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

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

scanf("%d",(\*(p1+i)+j));

}

}

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

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

scanf("%d",(\*(p2+i)+j));

}

}

int p[r][c];

int (\*p3)[c]=p;

product\_matrix(p3[c],p1[c],p2[c],&r,&c);

return 0;

}