Solutions to paper for GWECA, B. Tech. Sec-A & B, I Mid-Term Exam.–Mar-2017, FOC, Sub.code-206, Time: 1 Hr, MM: 20

1. Take two strings input using pointers and print the longer string in reverse order. If length is same then print ‘same length’. Use of string library functions is not allowed. (5)

#include<stdio.h>

#include<conio.h>

#include<string.h>

void main()

{

 char \*p,\*r,\*t;

 int i=0,j=0,l;

 gets(p);

 gets(r);

 t=p;

 while(\*t)

 {

 i++;

 t++;

 }

 t=r;

 while(\*t)

 {

 j++;

 t++;

 }

 if(i>j)

 {

 for(l=i-1;l>=0;l--)

 printf("%c",\*(p+l));

 }

 else if(j>i)

 {

 for(l=j-1;l>=0;l--)

 printf("%c",\*(r+l));

 }

 else

 {

 printf("Length is same");

 }

 getch();

 }

1. Take input of names of your five friends and print the name of the friend having maximum occurrences of character ‘a’ or ’A’ in the name and also print how many times it occurs. (5)

#include<stdio.h>

#include<conio.h>

#include<string.h>

void main()

{

 char n[5][20];

 int i,j,counta=0;

 int max=-1, maxindex=-1;

 clrscr();

 for(i=0;i<5;i++)

 {

 gets(n[i]);

 }

 for(i=0;i<5;i++)

 {

 counta=0;

 for(j=0;j<strlen(n[i]);j++)

 {

 if(n[i][j]=='a'||n[i][j]=='A')

 {

 counta++;

 }

 }

 if(max<counta)

 {

 max=counta;

 maxindex=i;

 }

 }

 printf("The highest occurence of character a is %d in %s",max,n[maxindex]);

 getch();

}

1. Perform the following number system operations (3+3+2+2)

|  |  |
| --- | --- |
| * 1. (326500)10↔(4FB64)16 ↔ (1175544)8
 | * 1. (4FB6400)16**-**(B15C4FD)16=(-61A60FD)16

Subtract using 2’s complement method |
| * 1. (24645.25)10 ↔ (110000001000101.01)2
 | * 1. (-547)10 ↔ (1000001000100011)2

Represent in 16 bit sign magnitude form |