C-Programming Lab Sheet
I Year / I Part
Faculty: Computer/Electrical/Civil

Labsheet#6

Objectives:
1. To familiarized with character type array declaration and initialization.
2. To understand the string handling function.
3. To demonstrate the passing of array to a function as argument.

Objectives #1
Character array:
1.1
```
#include<stdio.h>
#include<conio.h>
void main(){
char name[6] = {'k','h','w','o','p','a'};
printf("Contents of the array \n");
printf("%s", name);
getch();
}
```

1.2
```
#include<stdio.h>
#include<conio.h>
void main(){
char name[7]={'k','h','w','o','p','a'};
printf("Contents of the array \n");
printf("%s",name);
getch();
}
```

1.3
```
#include<stdio.h>
#include<conio.h>
#define NUM 5
#define LENGTH 10
void main(){
int j;
char name[NUM][LENGTH]={"Ram","Mohan","Shyam","Hari","Krishna"};
   for(j=0;j<NUM;j++)
  {
  printf("%s\n",name[j]);
  }
getch();
}
```

Assignment 1.1: Run the program 1.2 and 1.3 and note down the error and modify them to correct error. Discuss the difference between them.
Assignment 1.2: Note down the output of the program 3.3 and modify the program to input name of five people and display the name.
Assignment 1.3: WAP that will sort a list of names in alphabetical order, using string-handling functions.

Objectives #2
Array and Function:

2.1
```
#include<stdio.h>
#include<conio.h>
void modify(int a[]);      /Function prototype

void main(){
int count, a[3];
printf("\n From main, before calling the function \n");
   for(count=0; count<=2; count++)    {
   a[count]=count+1;
   printf("a[%d]=%d\n", count, a[count]);
   }
   modify(a);
   printf("\n From main, after calling the fuction \n");
   for(count=0;count<=2;count++)    {
   printf("a[%d]=%d\n", count, a[count]);
   }
}

void modify(int a[]){
int count;
printf("\nFrom main, after modifying the values \n");
   for(count=0; count<=2; count++)
   {
   a[count]= -5;
   printf("a[%d]=%d\n",count,a[count]);
   }
}
```

2.2
```
#include<stdio.h>
#include<conio.h>
#include<string.h>
int fun(char a[30]);

void main(){
int x;
char a[30];
gets(a);
x=fun(a);
printf("%d",x);
```

```
getch();
}

int fun(char a[30]){
int i,c=0;
int l;
l=strlen(a);
   for(i=0;i<l;i++)    {
   if(a[i]= ='a' || a[i]= ='e' || a[i]= ='i' || a[i]= ='o'|| a[i]= ='u')
   c++;
   }
return(c);
}
```

Assignment 4.1: Using F7 run the above program and make the comments about the program.
Assignment 4.2: WAP to read set of number from the keyboard and find out the smallest elements of the array using a function.
Assignment 4.3: WAP to read set of n number from the keyboard and sort them in ascending order-using function.
Assignment 4.3: WAP to read a line of string from the user and delete all the space from the string using function.