1. Count the no. of Vowels and Consonants in a Sentence.

```
#include <stdio.h>
int main(){
    char s[100]
    int i, v=0, c=0;
    printf("Enter the no");
    fgets (s, 100, String : "in")
    for(i = 0 ; str[i]='\0'; i++){
        if (str[i] == 'a' || str[i] == 'A' || str[i]=='e' ||
            str[i] == 'E' || str[i] == 'I' || str[i]=='i' ||
            str[i]=='o' || str[i]=='O' || str[i]=='u' ||
                str[i] == 'U')

        v++;
    else
        c ++;
}
printf ("Vowels : %d ", v);
printf ("Consonants: %d", c);
```

2. String palindrome:

```
#include <stdio.h>
int main(){
    char str[100], rev[100];
    gets(str);
    }
    strcpy(rev, str);
    strrev(rev);
    if(strcmp(str, rev)==0){
        printf("%s is a palindrome", str);
    }
    else{
        printf("%s is not a palindrome", str);
    }
    return 0;
    }.
```

3. Matrix multiplication:

```
#include <stdio.h>
int main(){
    int a[2][2], b[2][2], c[2][2];
    int i, j, k;
```

```
for(i=0; i<2; i++){
    for(j=0; j<2; j++){
        scanf("%d", &a[i][j]);
    }
}
for(i=0; i<2; i++){
    for(j=0; j<2; j++){
        scanf("%d", &b[i][j]);
    }
}
for(i=0; i<2; i++){
    for(j=0; j<2; j++){
        c[i][j] = 0; {
            for(k=0; k<2; k++){
                c[i][j] += a[i][k] * b[k][j];
            } }
        }
    }
for(i=0; i<2; i++){
    for(j=0; j<2; j++){
        printf("%d", c[i][j]);
    }
}
return 0;
}
```

4. Missing no. using arrays

```
#include <stdio.h>
int main(){
    int n=6, a[]={1,2,3,5,6}, sum=0;
    int total = (n*(n+1)/2);
    for(i=0; i<5; i++)
        sum+=a[i];
    printf("missing : %d", total);
    return 0;
}
```

5. Sum of array using pointers:

```
#include <stdio.h>
int main(){
    int n=5; a[]; {
    int *p=a;
    for(i=0; i<n; i++)
        sum+=(p+i);
    printf("%d", sum);
    return 0;
}
```