Q1:-

```c
#include<stdio.h>
int main()
{
        char str[10]="kritika";
        int i;
        for(i=0;str[i];i++);
        printf("Length of a string is %d",i);
        return 0;
}
```

Q2:-

```c
#include<stdio.h>
#include<string.h>
int main()
{
        char str[100];
        char character;
        int i,count=0;
        printf("Enter string:\n");
        fgets(str,100,stdin);
        fflush(stdin);
        printf("Enter character:\n");
        scanf("%c",&character);
        for(i=0;str[i];i++)
        {
                if(str[i]==character)
                count++;
        }
```

```c
        printf("%d",count);
}
```

Q3:-

```c
#include<stdio.h>
#include<string.h>
int main()
{
        char str[100],character;
        int i,count=0;
        printf("Enter string:\n");
        fgets(str,100,stdin);
        for(i=0;str[i];i++)
        {
                if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'||str[i]=='u')
                count++;
        }
        printf("Vowels in a string is %d",count);
}
```

Q4:-

```c
#include<stdio.h>
#include<string.h>
int main()
{
        char str[100];
        int i;
        printf("Enter string in lowercase:\n");
        fgets(str,100,stdin);
```

```c
        fflush(stdin);

        for(i=0;str[i];i++)

        {

                if(str[i]>='a'&&str[i]<='z')

                str[i]=str[i]-32;

        }

        printf("%s",str);

        return 0;

}
```

Q5:-

```c
#include<stdio.h>

#include<string.h>

int main()

{

        char str[100];

        int i;

        printf("Enter string in uppercase:\n");

        fgets(str,100,stdin);

        fflush(stdin);

        for(i=0;str[i];i++)

        {

                if(str[i]>='A'&& str[i]<='Z')

                str[i]=str[i]+32;

        }

        printf("%s",str);

        return 0;

}
```

Q6:-

```c
#include<stdio.h>

#include<string.h>

int main()

{

        char str[100];

        int i;

        printf("Enter a string:\n");

        fgets(str,100,stdin);

        int len=strlen(str);

        for(i=0;i<len/2;i++)

        {

                char temp=str[i];

                str[i]=str[(len-i)-1];

                str[(len-i)-1]=temp;

        }

        printf("%s",str);

        return 0;

}
```

Q7:-

```c
#include<stdio.h>

#include<string.h>

#include<stdlib.h>

int main()

{

        char str[100];

        int i,digit_count=0,special_count=0,alpha_count=0;

        printf("Enter string:\n");

        gets(str);
```

```c
        for(i=0;str[i];i++)
        {
                if(str[i]>='A' && str[i]<='Z' || str[i]>='a' && str[i]<='z')
                alpha_count++;
                else if(str[i]>='0' && str[i]<='9')
                digit_count++;
                else
                special_count++;
        }
        printf("Digits %d\nspecial character's %d\nalphabets
%d",digit_count,special_count,alpha_count);
        return 0;
}
```

Q8:-

```c
#include<stdio.h>
#include<string.h>
int main()
{
        char str[100];
        char copy[100];
        int i;
        printf("Enter string:\n");
        fgets(str,100,stdin);
        for(i=0;str[i]!='\0';i++)
        {
                copy[i]=str[i];
        }
        printf("%s",copy);
        return 0;
```

}

Q9:-

```c
#include<stdio.h>
#include<string.h>
int main()
{
        char str[100];
        int i,j;
        printf("Enter string:\n");
        fgets(str,100,stdin);
        for(i=0;str[i]!='\0';i++)
        {
                for(j=i+1;j<str[j]!='\0';j++)
                {
                        if(str[i]>str[j])
                        {
                        char temp=str[i];
                        str[i]=str[j];
                        str[j]=temp;
                        }
                }
        }
        printf("%s",str);
        return 0;
}
```

Q10:-

```c
#include<stdio.h>
```

```c
#include<string.h>

#include<stdlib.h>

int main()

{
        char str[100];

        int hash[150]={0};

        int i;

        printf("Enter string:\n");

        gets(str);

        for(i=0;str[i]!='\0';i++)

        {
                hash[str[i]]++;
        }

        for(i=0;i<150;i++)

        {
                if(hash[i]>0)

                printf("%c==>%d\n",i,hash[i]);
        }

        return 0;
}
```