Question 1- String reverse

Solution

```
#include<stdio.h>
#include<string.h>
int main()
{
    char s[100];
    scanf("%s",s);

    int len=0,i=0;
    while(s[i]!='\0')
    {
        i++;
        len++;
    }
    i=0;

    for(i=len-1; i>=0; i--)
    {
        printf("%c ",s[i]);
    }
    return 0;
}
```

Question 2- String concatenation

Solution -

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

int main()
{
   char s1[50]="Phi";
   char s2[]="tron";

   int i=0,len=0,j=0;

   while(s1[i]!='\0')
   {
      len++;
      i++;
   }

   while(s2[j]!='\0')
   {
      s1[len+j]=s2[j];
      j++;
   }

   printf("String = %s",s1);

   return 0;
}
```

Question 2- String sorting using frequency array

Solution -

```
/*

Steps -
1) Take input/initialization part

2) Find the largest element from the string (String er
khettre largest element is z(Roll number 26)

3) LargestElement+1 size er akta array niya setake 0 diya
fill korte hbe.

4) string traverse kore frequency array er corresponding
location increment kore dite hbe


5) Total koita distinct character ache tar count ber kora.

6) Every time next largest value and tar corresponding
character filter kore niya ashte hbe

7) Loop chaliya largest value time sei character ta print kore ditee hbe

*/


#include<stdio.h>
#include<string.h>

int main()
{
   char str[]="bbbbaccddd";

   int n=strlen(str),largestElement=26;

   int freq[largestElement+1];
```

```
for(int i=0; i<=largestElement; i++)
{
   freq[i]=0;
}



for(int i=0; i<n; i++)
{
   freq[(str[i]-'a')+1]++;
}

int total=0;
for(int i=1; i<=26; i++)
{
   if(freq[i]>=1)
   {
      total++;
   }
}

int nxt=0;
while(nxt!=total)
{
   int max=-1,index=-1;
   char ch;

   for(int i=1; i<=26; i++)
   {
      if(freq[i]>max)
      {
         max=freq[i];
         ch=i+96;
         index=i;
      }
   }
   for(int i=1; i<=max; i++)
   {
      printf("%c",ch);
```

```
        }
        freq[index]=0;
        nxt++;
    }
    printf("\n");

    return 0;
}
```