

#2

```
#include<stdio.h>
void main()
{
    int position=0,i=0;
    char letter,input[20];
    printf("Enter input string \t :");
    scanf("%s",input);
    while((letter=input[i++])!='\0')
    {
        switch(position)
        {
            case 0: if(letter=='a')
                    position=1;
                    else if(letter=='b')
                    position=3;
                    else
                    {
                        printf("Invalid letter");
                        exit(0);
                    }
                    break;

            case 1: if(letter=='a')
                    position=2;
                    else if(letter=='b')
                    position=3;
                    else
                    {
                        printf("Invalid letter");
                        exit(0);
                    }
                    break;
```

```
case 2: if(letter=='a')
        position=2;
        else if(letter=='b')
            position=3;
        else
        {
            printf("Invalid letter");
            exit(0);
        }
        break;
```

```
case 3: if(letter=='a')
        position=1;
        else if(letter=='b')
            position=4;
        else
        {
            printf("Invalid letter");
            exit(0);
        }
        break;
```

```
case 4: if(letter=='a')
        position=1;
        else if(letter=='b')
            position=4;
        else
        {
            printf("Invalid letter");
            exit(0);
        }
        break;
```

```
}
```

```
}  
if(position==2 || position==4)  
    printf("\n\nString accepted\n\n");  
else  
    printf("\n\nString not accepted\n\n");  
}
```