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                                               C q1Strings.c ×
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      V DESKTOP
                                               CEndModuleTest > C q1Strings,c >

∨ CEndModuleTest

                                                             printf("\nEnter Your String:\n");
       7fe8474a8692bf2c944bf0f2b6413b6...
                                                            gets(str);
printf("\nLength : %d", strlen(str));
          AWS Cloud Practitioner.pdf
                                                                 printf("\nEnter Your Choice :\n1)Count The No of Vowels. \t2)Count No of Consonants \n3)No of Spaces \t4)No of Digits in String: \n");
         printf("\nNo of vowels in string are: %d", noOfVowels(str));
0
                                                 PROBLEMS TERMINAL DEBUG CONSOLE OUTPUT PORTS
                                                 No of Spaces in string are: 12
Enter Your Choice:
1)Count The No of Yowels. 2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:
                                                                                                                                                                                                                                         ⊗ cppdbg: q1...
                                                 No of Digits in string are: 12
                                                 Enter Your Choice:
1)Count The No of Vowels.
2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:
> OUTLINE
> TIMELINE
                                                 Invalid Choice!!
Enter Your Choice:
JOcunt The No of Yowels. 2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:
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```
#include <stdio.h>
#include <string.h>
int noOfVowels(char[]);
int noOfConsonants(char[]);
int noOfSpaces(char[]);
int noOfDigits(char[]);
void main()
    printf("\nEnter Your String:\n");
    char str[250];
    fflush(stdin);
    gets(str);
    printf("\nLength : %d", strlen(str));
    {
        printf("\nEnter Your Choice :\n1)Count The No of Vowels. \t2)Count No of
Consonants \n3)No of Spaces \t4)No of Digits in String: \n");
        scanf("%d", &ch);
        switch (ch)
        case 1:
            printf("\nNo of vowels in string are: %d", noOfVowels(str));
            break;
            printf("\nNo of Consonants in string are: %d", noOfConsonants(str));
            break;
```

```
case 3:
            printf("\nNo of Spaces in string are: %d", noOfSpaces(str));
            break;
        case 4:
            printf("\nNo of Digits in string are: %d", noOfDigits(str));
            break;
        case 0:
            printf("\nExiting..");
            break;
        default:
            printf("\nInvalid Choice!!");
            break;
    } while (ch != 0);
int noOfVowels(char str[])
    int cnt = 0;
   for (int i = 0; str[i] != '\0'; i++)
        if (str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' || str[i] ==
'u' || str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == '0' || str[i] == 'U')
            cnt++;
        }
    return cnt;
int noOfConsonants(char str[])
{
    int cnt = 0;
   for (int i = 0; str[i] != '\0'; i++)
        // if ((str[i] != 'a' || str[i] != 'e' || str[i] != 'i' || str[i] != 'o' || str[i]
        if (str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' || str[i] ==
'u' || str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == '0' || str[i] == 'U')
            continue;
        else if ((str[i] >= '0' && str[i] <= '9') == 0 && str[i] != ' ')
            cnt++;
        }
   return cnt;
int noOfSpaces(char str[])
    int cnt = 0;
```

```
for (int i = 0; str[i] != '\0'; i++)
{
        if (str[i] == ' ')
        {
            cnt++;
        }
    }
    return cnt;
}
int noOfDigits(char str[])
{
    int cnt = 0;
    // int len = strlen(str);
    for (int i = 0; str[i] != '\0'; i++)
        // for (int i = 0; i <= len; i++)
        {
        if (str[i] >= '0' && str[i] <= '9')
              {
            cnt++;
        }
    }
    return cnt;
}</pre>
```

C:\Users\bhagv\Desktop> cmd /C "c:\Users\bhagv\.vscode\extensions\ms-vscode.cpptools-1.21.6-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe --stdin=Microsoft-MIEngine-In-h3f02afo.fvu --stdout=Microsoft-MIEngine-Out-xtoqcsqi.bjj --stderr=Microsoft-MIEngine-Error-k21dtizd.1n4 --pid=Microsoft-MIEngine-Pid-fpx0dixz.t30 --dbgExe=C:\TDM-GCC-64\bin\gdb.exe --interpreter=mi "

Enter Your String:

Hello I am Bhagvat Mutthe Roll no 96 My contact no is 8408921072

```
Length: 64
```

Enter Your Choice:

1)Count The No of Vowels. 2)Count No of Consonants

3) No of Spaces 4) No of Digits in String:

1

No of vowels in string are: 14

Enter Your Choice:

1)Count The No of Vowels. 2)Count No of Consonants

3)No of Spaces 4)No of Digits in String: 2	
No of Consonants in string are: 26	
Enter Your Choice :	
1)Count The No of Vowels.	2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:	
3	
No of Spaces in string are: 12	
Enter Your Choice :	
1)Count The No of Vowels.	2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:	
4	
No of Digits in string are: 12	
Enter Your Choice :	
1)Count The No of Vowels.	2)Count No of Consonants
3)No of Spaces 4)No of Digits	in String:
5	
Invalid Choice!!	
Enter Your Choice :	
1)Count The No of Vowels.	2)Count No of Consonants
3)No of Spaces 4)No of Digits in String:	
0	
Exiting	
C:\Users\bhagv\Desktop>	

Q3

```
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                                                                      void showProducts(Product *p)
                                                                           for (int i = 0; i < index; i++)

    a1Strings.exe

                                                                                 printf("\nProduct ID :%d", p[i].id);
printf("\nProduct Name :%s", p[i].name);
printf("\nProduct Price :%.2f", p[i].price);
         7fe8474a8692bf2c944bf0f2b6413b6...
                                                                     }
Product *|addDiscount(Product *p)
          aa03e7957603ac4ed9c3725dd28bbf...
           AWS Solutions Architect Associate D...
           Java Backend syllabus.pdf
                                                                                  if (p[i].price > 500)
0
                                                                                      temp[i] = p[i];
temp[i].price = p[i].price - (p[i].price * 0.20);
                                                            PROBLEMS 1 TERMINAL DEBUG CONSOLE OUTPUT PORTS
                                                            1)Add Products 2) Display All products 3) Add GST to each product 5) Print Final Bill
                                                                                                                                                                                                                                                                                                袋 cppdbg: q2...
                                                            Product ID :1
Product Name :khsbkf
Product Price :118.00
Product Name :akhsbkf
Product To:2
Product Name :akhsbkf
Product To:8
Product Name :ils.00
Product ID :3
Product Name :ajbhfk
Product Name :ajbhfk
Product Price :118.00
Enter Your Choice.
1)Add Products :2) Display All products
5) Print Final Bill
> OUTLINE
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PROJECTS
                                                                                                                             3) Add GST to each product
                                                                                                                                                                      4) Add Discounts to products
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                                                                                                            Q Search
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```

```
#include <stdio.h>
#include <stdlib.h>
int size = 5, index = 0;
typedef struct Product
    int id;
    char name[20];
    float price;
} Product;
void getProducts(Product *p, int usize)
    for (int i = 0; i < usize; i++, index++)</pre>
    {
        printf("\nEnter Product ID :");
        scanf("%d", &p[index].id);
        printf("\nEnter Product Name :");
        fflush(stdin);
        gets(p[index].name);
        printf("\nEnter Product Price :");
        scanf("%f", &p[index].price);
    }
void showProducts(Product *p)
    for (int i = 0; i < index; i++)
    {
        printf("\nProduct ID :%d", p[i].id);
        printf("\nProduct Name :%s", p[i].name);
        printf("\nProduct Price :%.2f", p[i].price);
```

```
Product *addDiscount(Product *p)
    Product *tempd = (Product *)malloc(sizeof(Product) * index);
    for (int i = 0; i < index; i++)</pre>
        tempd[i] = p[i];
    for (int i = 0; i < index; i++)
        if (p[i].price > 500)
            tempd[i].price = p[i].price - (p[i].price * 0.20);
            // printf("\nProduct Price With Discount 20%% is:%.2f", p[i].price);
        return tempd;
Product *addGST(Product *p)
    Product *temp = (Product *)malloc(sizeof(Product) * index);
    for (int i = 0; i < index; i++)</pre>
        temp[i] = p[i];
        temp[i].price = p[i].price + (p[i].price * 0.18);
    return temp;
void displayBill(Product *p)
    Product *temp;
    temp = addGST(p);
    for (int i = 0; i < index; i++)
        p[i] = temp[i];
    temp = addDiscount(p);
    for (int i = 0; i < index; i++)
        p[i] = temp[i];
    float totalAmount;
    printf("\n\tFinal Bill :");
    for (int i = 0; i < index; i++)
    {
        printf("\nProduct %d", i + 1);
        printf("\nProduct ID :%d", p[i].id);
        printf("\nProduct Name :%s", p[i].name);
        printf("\nProduct Price :%.2f", p[i].price);
        totalAmount += p[i].price;
```

```
printf("\n\tTotal Bill : %.4f\n", totalAmount);
void main()
    int sUser;
    Product *prod = (Product *)malloc(sizeof(Product) * size);
    int ch;
    {
        Product *temp;
        printf("\nEnter Your Choice.\n1)Add Products \t2) Display All products \t3) Add
GST to each product \t4) Add Discounts to products \n5) Print Final Bill\n");
        scanf("%d", &ch);
        switch (ch)
        case 1:
            printf("\nEnter How many products do you want to add : ");
            scanf("%d", &sUser);
            if (sUser > size)
                size = sUser;
                temp = (Product *)realloc(prod, sizeof(Product) * size);
                if (temp == NULL)
                    printf("\n\nReallocation Failed");
                    return; /* code */
                    prod = temp;
                }
            getProducts(prod, sUser);
            break;
        case 2:
            showProducts(prod);
            break;
        case 3:
            temp = addGST(prod);
            showProducts(temp);
            // free(temp);
            break:
        case 4:
            temp = addDiscount(prod);
            showProducts(temp);
            break;
        case 5:
            displayBill(prod);
            break;
        case 0:
            printf("\nExiting....");
```

```
free(temp);
    free(prod);
    break;
    default:
        printf("\nInvalid Choice!!");
        break;
    }
} while (ch != 0);
}
```

C:\Users\bhagv\Desktop> cmd /C "c:\Users\bhagv\.vscode\extensions\ms-vscode.cpptools-1.21.6-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe --stdin=Microsoft-MIEngine-In-gno4ojy2.jha --stdout=Microsoft-MIEngine-Out-auv1skpr.rum --stderr=Microsoft-MIEngine-Error-fdk4whzg.pij --pid=Microsoft-MIEngine-Pid-pwljhank.bwf --dbgExe=C:\TDM-GCC-64\bin\gdb.exe --interpreter=mi "

Enter Your Choice. 1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products 5) Print Final Bill 1 Enter How many products do you want to add: 3 Enter Product ID:1 Enter Product Name :kabfj Enter Product Price: 100 Enter Product ID:2 Enter Product Name :ajfha **Enter Product Price: 700**

Enter Product ID:3

Enter Product Name :jhaejha **Enter Product Price:550** Enter Your Choice. 1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products 5) Print Final Bill 2 Product ID:1 Product Name :kabfj Product Price:100.00 Product ID:2 Product Name :ajfha Product Price:700.00 Product ID:3 Product Name :jhaejha Product Price:550.00 Enter Your Choice. 1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products 5) Print Final Bill 3 Product ID:1 Product Name :kabfj Product Price:118.00 Product ID:2 Product Name :ajfha Product Price:826.00 Product ID:3 Product Name :jhaejha Product Price: 649.00

3) Add GST to each product

4) Add Discounts to products

Enter Your Choice.

1)Add Products 2) Display All products

5) Print Final Bill Product ID:1 Product Name :kabfj Product Price: 100.00 Product ID:2 Product Name :ajfha Product Price:700.00 Product ID:3 Product Name :jhaejha Product Price:550.00 Enter Your Choice. 1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products 5) Print Final Bill 5 Final Bill: Product 1 Product ID:1 Product Name :kabfj Product Price:118.00 Product 2 Product ID:2 Product Name :ajfha Product Price:826.00 Product 3 Product ID:3 Product Name :jhaejha Product Price:649.00 Total Bill: 1593.0000

Enter Your Choice.

1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products

5) Print Final Bill

6

Invalid Choice!!

Enter Your Choice.

- 1)Add Products 2) Display All products 3) Add GST to each product 4) Add Discounts to products
- 5) Print Final Bill

0

Exiting....

C:\Users\bhagv\Desktop>

Q2:

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                 ∨ DESKTOP
                         {} tasks.json
                                                                                                                                int numlen = noOfDigit(num);
while (numlen)

∨ CEndModuleTest

                                                                                                                              rev = (rev * 10) + (num % 10);

num /= 10;

numlen--;
                         C q1Strings.c
                  C q3Product.c 
52 7fe8474a8692bf2c944bf0f2b6413b6...
                    AWS Cloud Practitioner.pdf

    desktop.ini

    ▶ Devops.pdf
    ▶ Java Backend syllabus.pdf

                                                                                                                                  {
num /= 10;
cnt++;
                                                                                                          MIEngine-In-kcrin2ru.vcx --stdout-Microsoft-MIEngine-Out-prjdrrun.44c --stderr-Microsoft-MIEngine-Error-pomllmh3.euu --pid-Microsoft-MIEngine-Pid-yzrso2lb.p52 --db 💆 C/C++:... 🗴 gtxe-C:\IDM-GCC-64\bin\gdb.exe --Interpreter-ml *
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                                                                                                          87654321 : is revesre of 12345678
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 #include <stdio.h>
int revNum(int);
int noOfDigit(int);
void main()
                       int num;
                      printf("\nEnter a Number :");
                      scanf("%d", &num);
                      int rev = revNum(num);
                       printf("\n%d : is revesre of %d", rev, num);
```

```
int revNum(int num)
{
    int rev = 0;
    int numlen = noOfDigit(num);
    while (numlen)
        rev = (rev * 10) + (num % 10);
        num /= 10;
        numlen--;
    return rev;
int noOfDigit(int num)
    int cnt = 0;
    while (num != 0)
        num /= 10;
        cnt++;
    return cnt;
```