LAPORAN PRAKTIKUM

SESI I

PRAKTIKUM COMP6362 – DATA STRUCTURES

KELAS BC20

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MALANG

A. Kode Program

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

struct product{
        char *name;
        char *code;
        int stock;
        int price;

}a[101];

int main()
{
        int menu;
        int total;
        char kode[100], kode2[101];
        int quantity, stock_quantity;
        int stck;
        int parameter = 1;

//definisi produk 1
a[0].code = "MB007";
a[0].name = "Charging Cable";
a[0].price = 50000;
a[0].stock = 21;

//definisi produk 2
a[1].code = "MB010";
a[1].name = "Foldable Stand";
a[1].price = 65000;
a[1].stock = 15;

//definisi produk 3
a[2].code = "MB014";
a[2].name = "Bluetooth Speaker";
a[2].price = 75000;
a[2].stock = 25;

//definisi produk 4
a[3].code = "MB019";
a[3].name = "Screen Protector";
a[3].price = 90000;
a[3].stock = 20;

//definisi produk 5
a[4].code = "MB025";
a[4].name = "Cyrstal Clear Case";
a[4].price = 125000;
a[4].stock = 17;

//definisi produk 6
a[5].code = "MB028";
a[5].name = "Power Bank";
a[5].price = 240000;
a[5].stock = 26;
```

```c
//definisi produk 7
a[6].code = "MB031";
a[6].name = "Wireless Charging Stand";
a[6].price = 300000;
a[6].stock = 10;

    printf("BLINK MOBILE PHONE ACCECORIES SHOP CASHIER\n");
        printf("=========================================\n\n");

        while (parameter == 1){


        printf("No. :  Code  : Product Name             :  Available :
Price\n");
        printf("-------------------------------------------------------
-------\n");
        printf("1.  : MB007  : Charging Cable           :      %d : Rp.
50000,- \n", a[0].stock);
        printf("2.  : MB010  : Foldable stand           :      %d : Rp.
65000,- \n", a[1].stock);
        printf("3.  : MB014  : Bluetooth Speaker        :      %d : Rp.
75000,- \n", a[2].stock);
        printf("4.  : MB019  : Screen Protector         :      %d : Rp.
90000,- \n", a[3].stock);
        printf("5.  : MB025  : Crystal Clear Case       :      %d : Rp.
125000,- \n", a[4].stock);
        printf("6.  : MB028  : Power Bank               :      %d : Rp.
240000,- \n", a[5].stock);
        printf("7.  : MB031  : Wireless Charging Stand  :      %d : Rp.
300000,- \n", a[6].stock);
        printf("-------------------------------------------------------
-------\n");
        printf("\n\nMenu : \n");
        printf("1. Sell\n");
        printf("2. Add Stock\n");
        printf("3. Exit\n");
        printf("\nInput Choice [1/2/3] : ");
        scanf("%d", &menu); fflush(stdin);

        switch(menu)
        {
                case 1:
                printf("Input Product Code [5 chars]: ");
                scanf("%s", &kode); fflush(stdin);

                if (strcmp(kode, "MB007")==0){
                      printf("Input Quantity [0....%d]: ", a[0].stock);
                   scanf("%d", &quantity);
                   if (quantity > a[0].stock || quantity < 0){
                      printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                        }
                   else {
                   total = quantity * a[0].price;
                      a[0].stock = a[0].stock - quantity;
                   printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[0].price , quantity, total);
                   printf("\n--Thank You--\n\n");
                        }
```

```c
                }
        else if (strcmp(kode, "MB010")==0){
                printf("Input Quantity [0....%d]: ", a[1].stock);
            scanf("%d", &quantity);
            if (quantity > a[1].stock || quantity < 0){
                printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                }
            else {
            total = quantity * a[1].price;
                a[1].stock = a[1].stock - quantity;

                printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[1].price , quantity, total);
                printf("\n--Thank You--\n\n");
                }
        }
        else if (strcmp(kode, "MB014")==0){
                printf("Input Quantity [0....%d]: ", a[2].stock);
            scanf("%d", &quantity);
            if (quantity > a[2].stock || quantity < 0){
                printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                }
            else {
            total = quantity * a[2].price;
                a[2].stock = a[2].stock - quantity;

                printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[2].price , quantity, total);
                printf("\n--Thank You--\n\n");
                }
        }
        else if (strcmp(kode, "MB019")==0){
                printf("Input Quantity [0....%d]: ", a[3].stock);
            scanf("%d", &quantity);
            if (quantity > a[3].stock || quantity < 0){
                printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                }
            else {
            total = quantity * a[3].price;
                a[3].stock = a[3].stock - quantity;

                printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[3].price , quantity, total);
                printf("\n--Thank You--\n\n");
                }
        }
        else if (strcmp(kode, "MB025")==0){
                printf("Input Quantity [0....%d]: ", a[4].stock);
            scanf("%d", &quantity);
            if (quantity > a[4].stock || quantity < 0){
                printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                }
            else {
            total = quantity * a[4].price;
```

```c
                    a[4].stock = a[4].stock - quantity;

                    printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[4].price , quantity, total);
                    printf("\n--Thank You--\n\n");
                    }
                }
            else if (strcmp(kode, "MB028")==0){
                    printf("Input Quantity [0....%d]: ", a[5].stock);
                scanf("%d", &quantity);
                if (quantity > a[5].stock || quantity < 0){
                    printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                    }
                else {
                total = quantity * a[5].price;
                    a[5].stock = a[5].stock - quantity;

                    printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[5].price , quantity, total);
                    printf("\n--Thank You--\n\n");
                    }
                }
            else if (strcmp(kode, "MB031")==0){
                    printf("Input Quantity [0....%d]: ", a[6].stock);
                scanf("%d", &quantity);
                if (quantity > a[6].stock || quantity < 0){
                    printf("...The Quantity of Mobile Phone Accecories is
Not Enough...\n\n");
                    }
                else {
                total = quantity * a[6].price;
                    a[6].stock = a[6].stock - quantity;

                    printf("\nTotal Price is : Rp. %d,- x %d = Rp %d,-",
a[6].price , quantity, total);
                    printf("\n--Thank You--\n\n");
                    }
                }
             else {
                    printf("---The Mobile Phone Accecories Code doesn't
Exist---\n\n");
                }
            break;

        case 2:
            printf("Input Product Code: ");
            scanf("%s", &kode2); fflush(stdin);

            if (strcmp(kode2, "MB007")==0){

            printf("Input Quantity[1..100]: ");
            scanf("%d", &stock_quantity);

            if(stock_quantity <= 100 && stock_quantity > 0){
                    a[0].stock = a[0].stock + stock_quantity;
            printf("---Adding Stock Success---\n\n");
                }
                else {
```

```c
                printf("Only 1 until 100\n\n");
        }

        }

        else if(strcmp(kode2, "MB010")==0){
printf("Input Quantity[1..100]: ");
scanf("%d", &stock_quantity);

if(stock_quantity <= 100 && stock_quantity > 0){
        a[1].stock = a[1].stock + stock_quantity;
printf("---Adding Stock Success---\n\n");
        }
        else {
                printf("Only 1 until 100\n\n");
        }
        }

        else if(strcmp(kode2, "MB014")==0){
printf("Input Quantity[1..100]: ");
scanf("%d", &stock_quantity);

if(stock_quantity <= 100 && stock_quantity > 0){
        a[2].stock = a[2].stock + stock_quantity;
printf("---Adding Stock Success---\n\n");
        }
        else {
                printf("Only 1 until 100\n\n");
        }
        }

        else if(strcmp(kode2, "MB019")==0){
printf("Input Quantity[1..100]: ");
scanf("%d", &stock_quantity);

if(stock_quantity <= 100 && stock_quantity > 0){
        a[3].stock = a[3].stock + stock_quantity;
printf("---Adding Stock Success---\n\n");
        }
        else {
                printf("Only 1 until 100\n\n");
        }
        }

        else if(strcmp(kode2, "MB025")==0){
printf("Input Quantity[1..100]: ");
scanf("%d", &stock_quantity);

if(stock_quantity <= 100 && stock_quantity > 0){
        a[4].stock = a[4].stock + stock_quantity;
printf("---Adding Stock Success---\n\n");
        }
        else {
                printf("Only 1 until 100\n\n");
        }
        }

else if(strcmp(kode2,"MB028")==0){
printf("Input Quantity[1..100]: ");
```

```c
            scanf("%d", &stock_quantity);

            if(stock_quantity <= 100 && stock_quantity > 0){
                   a[5].stock = a[5].stock + stock_quantity;
            printf("---Adding Stock Success---\n\n");
                   }
                   else {
                          printf("Only 1 until 100\n\n");
                   }
                   }

                   else if(strcmp(kode2,"MB031")==0){
            printf("Input Quantity[1..100]: ");
            scanf("%d", &stock_quantity);

            if(stock_quantity <= 100 && stock_quantity > 0){
                   a[6].stock = a[6].stock + stock_quantity;
            printf("---Adding Stock Success---\n\n");
                   }
                   else {
                          printf("Only 1 until 100\n\n");
                   }
                   }

             else {
                   printf("---The Mobile Phone Accecories Code doesn't
Exist---\n\n");
                   }
            break;

            case 3:
                   printf("Programm Clossed, Thank You\n");
                   parameter = 0;

      }

}
}
```

B. Deskripsi Program

Program memiliki 3 menu yaitu Sell product, Add stock dan Exit

Tampilan Awal Programm:


```
C:\Users\Bisma\Documents\bram\Kuliah sms 2\data structures\praktikum 1\praktikum1.exe
BLINK MOBILE PHONE ACCECORIES SHOP CASHIER
=========================================
No. :  Code  : Product Name             :  Available :  Price
-----------------------------------------------------------------
1.  : MB007  : Charging Cable           :         21 : Rp. 50000,-
2.  : MB010  : Foldable stand           :         15 : Rp. 65000,-
3.  : MB014  : Bluetooth Speaker        :         25 : Rp. 75000,-
4.  : MB019  : Screen Protector         :         20 : Rp. 90000,-
5.  : MB025  : Crystal Clear Case       :         17 : Rp. 125000,-
6.  : MB028  : Power Bank               :         26 : Rp. 240000,-
7.  : MB031  : Wireless Charging Stand  :         10 : Rp. 300000,-
-----------------------------------------------------------------


Menu :
1. Sell
2. Add Stock
3. Exit

Input Choice [1/2/3] : _
```

Menu 1 : Sell


```
Input Choice [1/2/3] : 1
Input Product Code [5 chars]: MB007
Input Quantity [0....21]: 1

Total Price is : Rp. 50000,- x 1 = Rp 50000,-
--Thank You--
```

Apabila kode produk benar maka user diminta untuk menginput jumlah yang diinginkan dengan syarat jumlah > 0 dan jumlah<= 100.

Ketika kode produk salah :

```
Input Choice [1/2/3] : 1
Input Product Code [5 chars]: aaaa
---The Mobile Phone Accecories Code doesn't Exist---
```

Maka program akan memunculkan "The Mobile Phone Accessories Code doesn't Exist, lalu kembali ke menu awal.

Apabila jumlah tidak memenuhi syarat input maka:

```
Input Choice [1/2/3] : 1
Input Product Code [5 chars]: MB007
Input Quantity [0....21]: 22
...The Quantity of Mobile Phone Accecories is Not Enough...
```

Maka program akan memunculkan tulisan "The Quantity of Mobile Phone Accessories is Not Enough" lalu kembali ke menu awal.

Setelah pembelian terjadi maka stok akan diperbarui :

Sebelum di update

```
-----------------------------------------------------------------
1.  : MB007  : Charging Cable            :        21 : Rp. 50000,-
```

Penginputan sejumlah 1

```
Input Choice [1/2/3] : 1
Input Product Code [5 chars]: MB007
Input Quantity [0....21]: 1

Total Price is : Rp. 50000,- x 1 = Rp 50000,-
--Thank You--
```

Setelah di update

```
1.  : MB007  : Charging Cable            :        20 : Rp. 50000,-
```

Menu 2 : Add Stock

```
Input Choice [1/2/3] : 2
Input Product Code: MB031
Input Quantity[1..100]: 2
---Adding Stock Success---
```

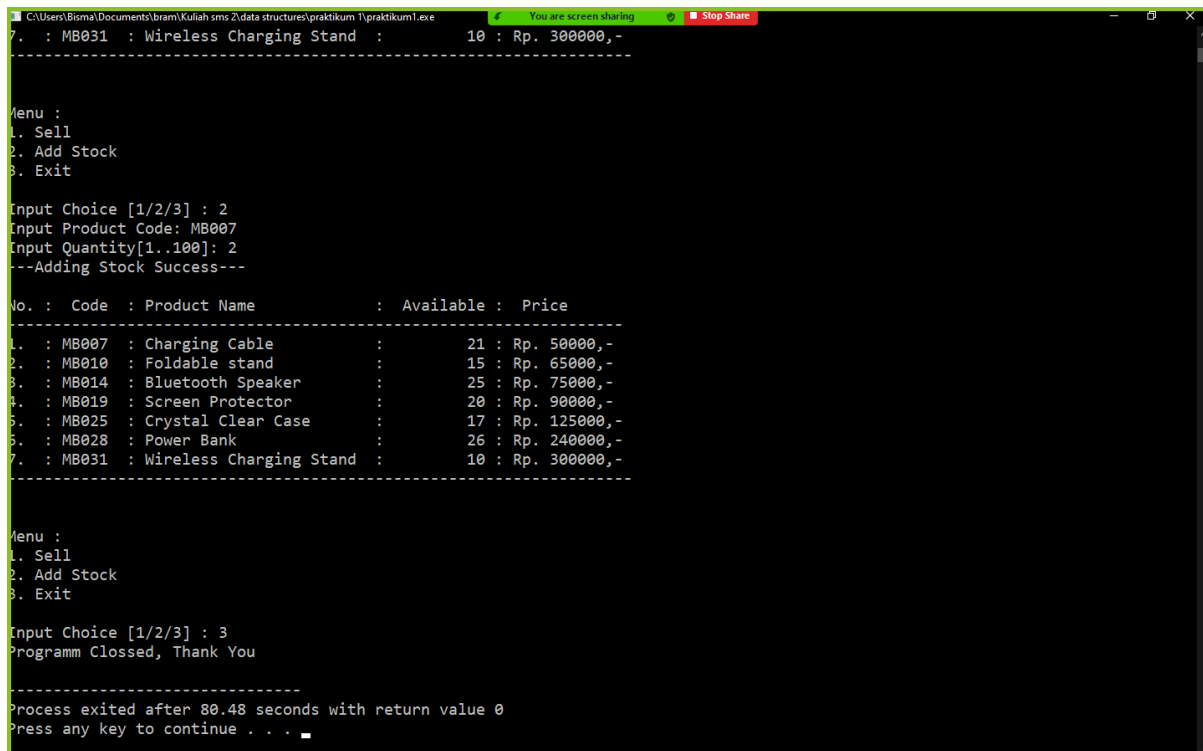Sama seperti Menu 1 , program akan mengecek kode, apabila kode yang di inputkan benar maka program akan meminta user untuk memasukan jumlah dengan syarat minimal 1 dan tidak lebih dari 100, apabila telah selesai maka program akan menampilkan tulisan "Adding Stock Success"

Kemudian kembali ke menu awal.

Apabila kode salah maka akan sama dengan yang ada di menu 1, apabila input produk tidak sesuai maka program akan menampilkan tulisan "Only 1 until 100" lalu kembali ke menu awal

```
Input Quantity[1..100]: 1011
Only 1 until 100
```

Stok sebelum update:

```
7.  : MB031  : Wireless Charging Stand  :       10 : Rp. 300000,-
-----------------------------------------------------------------
```

Input stok:

```
Input Choice [1/2/3] : 2
Input Product Code: MB031
Input Quantity[1..100]: 2
---Adding Stock Success---
```

Setelah update stock:

```
7.  : MB031  : Wireless Charging Stand  :       12 : Rp. 300000,-
-----------------------------------------------------------------
```

Menu 3:

Program akan menampilkan tulisan "Program Closed, Thank You" , lalu program akan berhenti run code dan selesai.

C. Bukti Presentasi