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CSC3320 System Level Programming

Lab Assignment 7 – Post-Lab

Part 1:

Question 1:

Execute and output:

Source Code:

```c
#include <stdio.h>

int main()

{

    char phoneNumber[12];

    printf("Enter phone number [(999)999-9999]: ");

    scanf("%s", phoneNumber);

    printf("You entered %.*s", 3, phoneNumber+1);

    printf("-%.*s\n", 8, phoneNumber+5);

    return 0;

}
```

Question 2:

Execute and output:

```
[choang7@gsuad.gsu.edu@snowball Lab7]$ vi calcPrice.c
[choang7@gsuad.gsu.edu@snowball Lab7]$ cc -o calcPrice calcPrice.c
[choang7@gsuad.gsu.edu@snowball Lab7]$ ./calcPrice
Enter item number:123
Enter unit price:10
Enter quantity:20
Enter purchase date (mm/dd/yyyy):03/06/2021
Item    Unit Price      QTY     Purchase Date   Total Amount
123     $    10.00      20      03/06/2021      $   200.00
[choang7@gsuad.gsu.edu@snowball Lab7]$
```

Source Code:

```c
#include <stdio.h>
int main() {
        int itemNum;
        int qty;
        double unitPrice;
        char purchaseDate[10];
        printf("Enter item number:");
        scanf("%d", &itemNum);
        printf("Enter unit price:");
        scanf("%lf", &unitPrice);
        printf("Enter quantity:");
        scanf("%d", &qty);
        printf("Enter purchase date (mm/dd/yyyy):");
        scanf("%s", &purchaseDate);
        double totalAmt = qty * unitPrice;
        printf("Item\tUnit Price\tQTY\tPurchase Date\tTotal Amount\n");
        printf("%d\t$%9.2lf\t%d\t%s\t$%9.2lf\n",itemNum, unitPrice, qty,
        purchaseDate, totalAmt);
        return 0;
}
```

Part 2:

Execute and Output:

```
[choang7@gsuad.gsu.edu@snowball Lab7]$ vi getPhoneNumber.sh
[choang7@gsuad.gsu.edu@snowball Lab7]$ ./getPhoneNumber.sh
Enter phone number [(999)999-9999]: (564)142-5620
You entered 564-142-5620
[choang7@gsuad.gsu.edu@snowball Lab7]$
```

Source Script:

```
#!/bin/bash

echo -n "Enter phone number [(999)999-9999]: "
read num

echo -n "You entered "
output=$(echo "$num" | sed "s/(//g"| sed "s/)/-/g"); echo "$output"
```

General Idea: Use sed to substitute character "(" with nothing and ")" with "-".