1. What is the output for the following code:

(a) while a > b: if a > 5: a -= 2 $\vec{b} = \vec{1}$ elif b > 5: a -= 5 b += 10 else: a -= 2 b -= 3 print(a,b)

if a = 10, and b = 7

2. Draw a flowchart for each of the two blocks of code from 1.

(b)

s = "my name is Mary"
index = 0 while s[index] != 'M': index += 1
print(index)

3. Write a program that finds the product of five numbers (using for loop), and user can run this calculation as many times as he/she wants (without re-running the program) for different inputs.

<u>comment</u>: at the end of calculation your program should ask whether the user wants to do it again or not.

Here is a sketch of the program:

```
def main():
```

```
print("This program finds the product of five given values.")
```

```
answer = "y"
while answer[0] == "y":

P = 1
for i in range(5):
    # get the next value from the user
    # update product p
    print("Their product is",p)
    answer = input("Do you want to do it again? (Enter yes or
```

```
no)").lower()
```

```
print("Have a good day!")
```

main()